C A L I F O R N I A

OIL WORLD

Alaska · Arizona · California · Colorado · Idaho · Montana · New Mexico · Nevada · Oregon · Utah · Washington · Wyoming · Western Canada

TWICE MONTHLY • FIRST ISSUE • DECEMBER 1961 • 54th Year Vol. 54 No. 23

TECHNICAL SERVICE • CONSTANT RESEARCH • 24 HOUR SERVICE • ASK THE MAN IN THE R
THE MAN IN THE RED CAR • MORE KNOW HOW • PROVEN PRODUCTS • CONSTANT RESEAR
PROVEN PRODUCTS • FREE TECHNICAL SERVICE • CONSTANT RESEARCH • 24 HOUR SERV
4 HOUR SERVICE • ASK THE MAN IN THE RED CAR • MORE KNOW HOW • PROVEN PRODU
TECHNICAL SERVICE • CONSTANT R HOUR SERVICE • MOST EXPERIENCED
ASK THE MAN IN THE RED CAR PROVEN PRODUCTS • MORE KNOW
PROVEN PRODUCTS • FREE ANT RESEARCH • 24 HOUR SERV
24 HOUR SERVICE • ASK T KNOW HOW • PROVEN PRODU
TECHNICAL SERVICE • CO ICE • MOST EXPERIENCED •
ED • ASK THE MAN IN T OVEN PRODUCTS • MOST E
• CONSTANT RESEARCH AL SERVICE • CONSTANT RE
THE MAN IN THE RED CA UCTS • ASK THE MAN IN T
L SERVICE • MOST EXPE D CAR • MORE KNOW HOW
PROVEN PRODUCTS • FREE NT RESEARCH • 24 HOUR SERV
STANT RESEARCH • 24 HOUR NCED • ASK THE MAN IN THE RED
ICE • ASK THE MAN IN THE RED CAR OW HOW • PROVEN PRODUCTS • MOST E
ODUCTS • MOST EXPERIENCED • FREE TECHNICAL SERVICE • CONSTANT RESEARCH • 24
MAN IN THE RED CAR • MORE KNOW HOW • PROVEN PRODUCTS • FREE TECHNICAL SERVICE
24 HOUR SERVICE • FREE TECHNICAL SERVICE • CONSTANT RESEARCH • 24 HOUR SERV
T EXPERIENCED • ASK THE MAN IN THE RED CAR • MORE KNOW HOW • PROVEN PRODUC

JAN 3 1962

TEXAS ENGINEERS LIBRARY
COLLEGE STATION, TEXAS

TRETOLITE PROVEN PRODUCTS FOR PRODUCTION • REFINING • PIPELINE

ASK THE MAN IN THE RED CAR
FOR FREE TECHNICAL SERVICE

PETROLITE CORPORATION

SUBSIDIARY AND AFFILIATED COMPANIES
CANADA, Edmonton, Alberta • ENGLAND, London
GERMANY, Frankfurt, a. M. • VENEZUELA, Caracas

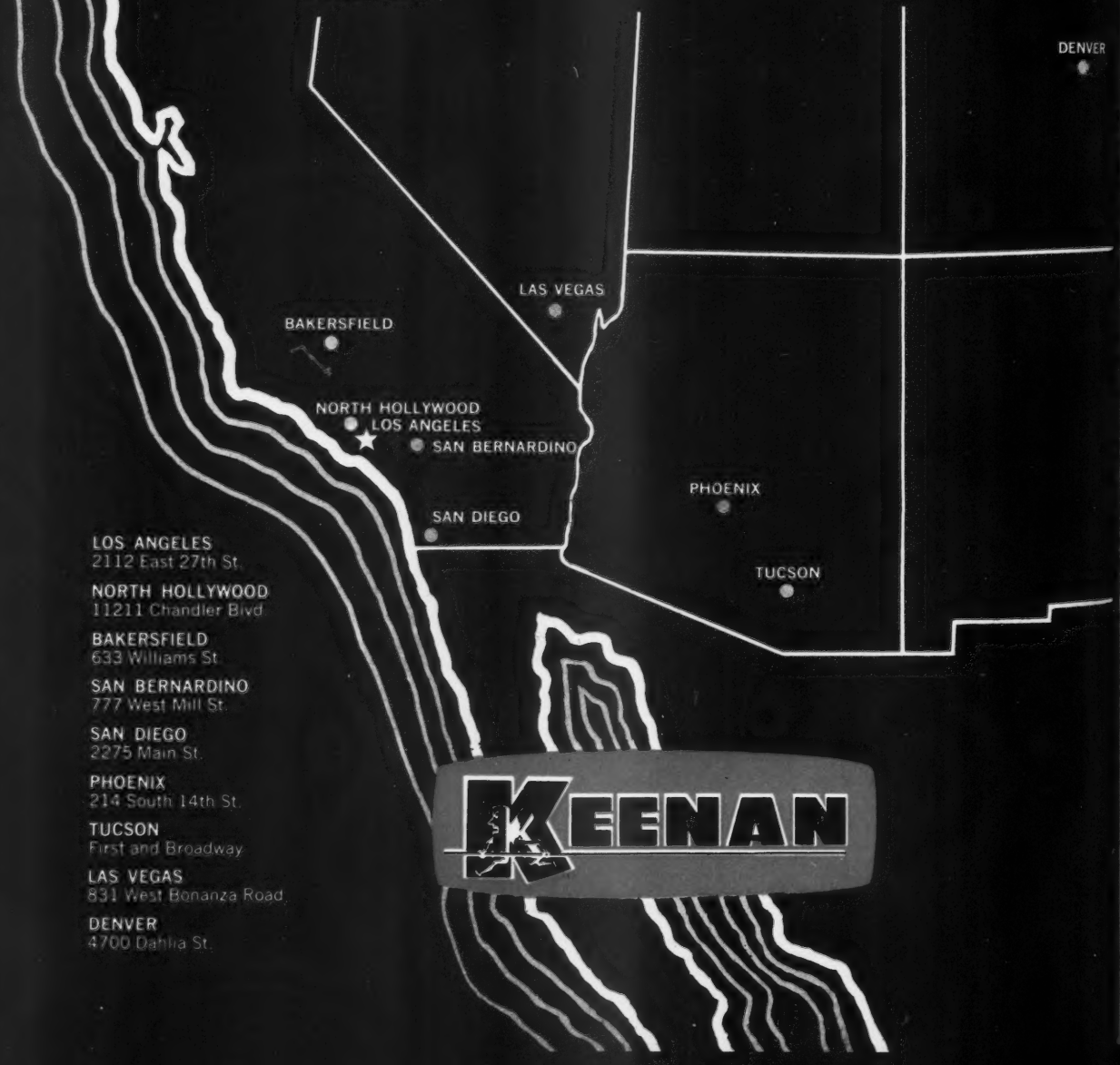
REPRESENTATIVES
ARGENTINA, Buenos Aires • BRAZIL, Rio de Janeiro • COLOMBIA, Bogota
ITALY, Rome • JAPAN, Tokyo • KUWAIT, Kuwait • MEXICO, Mexico, D. F.
NETHERLANDS, The Hague • TRINIDAD, Port of Spain

TRETOLITE COMPANY
OF CALIFORNIA
DIVISION
SO. PUENTE STREET, BREA, CALIF.

KEENAN
PIPE & SUPPLY CO.

stocks thousands of items at nine convenient warehouses for you

You can solve all your supply problems with one phone call to any of the nine convenient Keenan warehouses located throughout the Southwest. Thousands of items — many leading lines — are quickly available. Our business is built on personalized service and careful attention to each order regardless of size. Call or write today.



LOS ANGELES
2112 East 27th St.

NORTH HOLLYWOOD
11211 Chandler Blvd.

BAKERSFIELD
633 Williams St.

SAN BERNARDINO
777 West Mill St.

SAN DIEGO
2275 Main St.

PHOENIX
214 South 14th St.

TUCSON
First and Broadway

LAS VEGAS
831 West Bonanza Road

DENVER
4700 Dahlia St.

CALIFORNIA
OIL WORLD
PUBLISHED TWICE A MONTH
By
PETROLEUM PUBLISHERS, INC.
KINZIE MILLER—President and Editor • LARRY O. MILLER—Secretary and Advertising Manager
RICHARD SNEDDON—Contributing Editor
2404 WEST 7th STREET, LOS ANGELES 57, CALIFORNIA • DUnkirk 2-6218
BRANCH OFFICES
CHICAGO—FRED JONES & SON—Room 517, 205 W. Wacker Drive, Chicago 6
CLEVELAND—HOWARD F. McCLENAHAN—1900 Euclid Ave., Cleveland 15
NEW YORK—JAY TUTHILL—501 FIFTH AVENUE, NEW YORK 17
WASHINGTON, D.C. CORRESPONDENT—LORANIA K. FRANCIS
AUDITED PAID CIRCULATION ABC
FIRST ISSUE
DECEMBER, 1961
VOL. 54 • NO. 23
WHOLE NO. 2077
December 15, 1961
California Oil World is published twice a month at 2404 West 7th St., Los Angeles 57, California. Second-Class Postage Paid at Los Angeles, California. Subscription price $1 per year in U. S. and possessions, $2 in foreign countries, including Canada.

California Oil Industry Opposes State Regulation of Gas Producers

The staff of the California Public Utilities Commission proposed, and the oil industry strongly opposed, regulation of the state's gas producers at a series of hearings in Los Angeles beginning December 4.

The hearings were held in the State Office Building and were presided over by Commissioner Peter E. Mitchell and Examiner William W. Dunlop. Their importance was shown by the presence of most of the other commissioners and several hundred interested spectators.

The order instituting the hearings said the purpose was to determine whether regulation of natural gas production in this state, and its transmission and sale, would make more effective the regulation of gas corporations now under commission jurisdiction, and any other public utilities selling, transporting or consuming natural gas, and therefore would be in the public interest.

The opening statement of the staff was made by Franklin Campbell, Public Utilities Commission staff counsel.

His statement recommended all sales of gas for resale or sales for industrial purposes should be regulated. This type of regulation was proposed because it was felt that production as such could not be regulated, because gas is usually produced with oil and oil cannot be regulated since it has nothing to do with public utilities.

The staff report contemplates a procedure where each gas producer would have to file an application for a certificate of necessity. The Public Utilities Commission would then hold a hearing and grant or deny the certificate. If granted, the producer could then proceed to sell his gas. The price at which the gas was to be sold would, of course, not only be scrutinized by the Commission but would have to be approved by it. The same procedure would have to be gone through in case of any increase or decrease in prices. Gas producers already under contract with utilities would have their contracts reviewed by the Commission.

As for reasons for this recommendation, much is made of the fact that California gas prices average over 29c per thousand cubic feet, while in Texas gas may be purchased for 14c per thousand cubic feet. It is also pointed out that in 1962 the Pacific Lighting Gas Supply Co. will pay prices equal to those at the border for out-of-state gas, or an average of 34.5c per thousand cubic feet.

The Commission staff is apparently of the opinion that California prices are too high and should be reduced or kept down.

The Commission staff report also says that gas reserves in California are not accurately known and intimates that such information about a natural resource is in the public interest and that regulation would help supply this information. They think the fact that gas distribution is regulated, while production is not, puts the California picture out of balance.

The matter of the Southern California Edison Co. purchase from Richfield is referred to at some length and the report states that the Pacific Lighting group's fear of losing much more gas through sales from producers to industrial users caused them to make the long-term contracts with California gas producers which raised the price to the border price for out-of-state gas.

The staff thinks that if changes are not made in the law, the utilities will lose many more customers among industrial users and municipalities to the great detriment of the utilities.

The report states that regulation will prevent price competition between the utilities and industrial users and municipalities which makes prices unnecessarily high.

In conclusion, the staff report recommends that legislation be drafted and introduced into the legislature which would give the Public Utilities Commission jurisdiction to regulate all sales of natural gas for resale or industrial use, except that gas which is used by producers.

In these hearings the utilities were "respondents" and the oil companies and others were "interested parties."

The gas companies in their opening statements opposed the regulation of gas producers. Their position was that their role as certified suppliers in various areas was of course under the jurisdiction of the Public Utilities Commission and should remain so. They felt that they had historically shown the ability to negotiate contracts with gas producers at fair and reasonable rates and that regulation of the producers would be of no benefit to them and also not in the public interest.

They did make quite a pitch, though, for legislation similar to S.B. 1268, which the oil industry success-

fully opposed during the last legislature. It will be recalled that if this legislation had been passed no gas producer or other non-utility could have constructed a pipeline to deliver gas to an industrial user without first having secured a certificate of necessity from the Public Utilities Commission. This is the result of the famous Richfield case, where Richfield made a contract to supply a Southern California Edison Co. steam plant in Ventura County with gas and built a pipeline to deliver it. The Supreme Court of California decided that Richfield could do this lawfully without reference to the Public Utilities Commission.

The gas companies' attitude may be more completely explained by the following excerpts from the joint statement of Southern California Gas Co., Southern Counties Gas Co. and Pacific Lighting Gas Supply Co.

Gas Companies' Statement

In the nature of things, it appears likely that this proceeding will be identified primarily with the issue of regulating California natural gas prices at the wellhead. "Regulation of producers of natural gas in California with respect to rates"—which we interpret to mean prices charged for gas either at the wellhead, field gathering points or at the outlet of processing plants — was the item placed first in order in the Commissioner's letter. At the outset, therefore, we want to make it clear that we do not advocate regulation of California producers with respect to rates. We do not believe that such regulation would tend to make more effective the regulation and supervision by the Commission of gas corporations and any other public utilities selling, transporting, transmitting or consuming natural gas.

Our convictions are based upon a number of considerations. It is not at all clear to us that Commission supervision of wellhead prices for natural gas, imposed at this juncture, would be workable or serve the purpose generally associated with such regulation. In saying this, we are not unaware that the prices which our companies pay to producers of California source gas are in excess of wellhead prices paid to producers of the gas we buy from sources outside of California. The prices we pay to California producers have attained current levels not because such prices were unregulated in past years, but due to other specific causes.

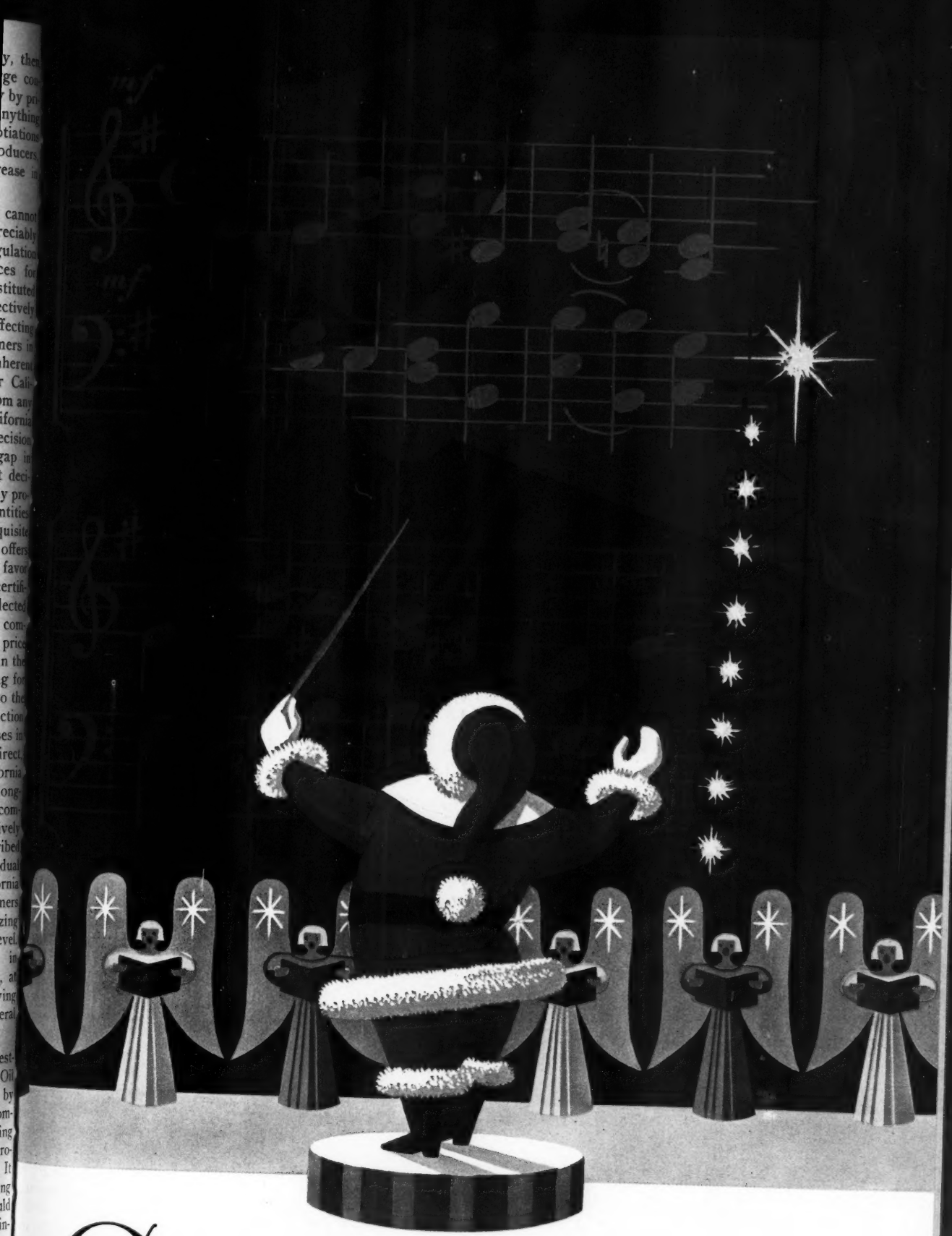
If we look at the situation which existed up until the mid-1950s, there was no need to regulate California gas producers. In the forepart of the 1950s, increases in field prices for California gas were negotiated from time to time, and were generally moderate and in line with prevailing trends affecting other commodities. The public interest did not require placing regulation upon a complex and risk-taking industry which, by its nature, has proved not to be susceptible to regulation by traditional standards and formulas.

In the latter half of the 1950-1960 decade there was a development in Southern California which activated sharp increases in the field price of gas in Southern California. This development was the direct purchase of a very large volume of gas, ultimately fixed at 500 billion cubic feet or about one-sixteenth of the State's total gas reserves by Southern California Edison Company from Richfield Oil Corporation, together with widespread negotiations aimed at further purchases of that kind. The potential magnitude of further purchases contemplated at that time was indicated in testimony prepared by Southern California Edison Company dated August 9, 1957, and placed in the hands of all parties in Application No. 39250. This testimony stated that the pipeline facilities which Edison proposed to build were not just for the Richfield gas but for supplies of gas to be built up over a twenty-year period to 790 million cubic feet of gas per day. In any case, prices offered by Edison for California source gas at that time were higher than prevailing prices, and approximated the price paid at the California border for out-of-state gas.

Even if regulation of field prices had existed for sales to gas utilities, it would not have been effective in holding the price line. Under California law as it has evolved the direct sales to ultimate consumers would have been classified as sales under selected private contracts not subject to regulation. In this situation regulation of gas sales to gas utility companies would have stimulated direct, non-jurisdictional sales. That would have been contrary to the public interest. Actually, then it was the efforts by a large consumer to acquire gas directly by private contract, rather than anything inherent in traditional negotiations between utilities and gas producers that resulted in rapid increase in price.

Looking to the future, we cannot see that the situation is appreciably different. We think that regulation of California producer prices for sales to gas utilities, if instituted today, would not deal effectively with the principal problem affecting the interest of all gas customers in California. That problem is inherent in the direct contracting for California gas which was freed from any regulatory scrutiny by the California Supreme Court's Richfield decision (54 C.2d 419). Unless the gap in regulation established by that decision is closed by legislation, any producer possessing feasible quantities of uncommitted gas and the requisite financial capability can reject offers from regulated gas utilities in favor of raiding the territory of a certificated utility and taking over selected customers being served by that company. In other words, field price regulation in itself, if initiated in the future, could not restore trading for California gas as it existed up to the mid-1950s. Our best protection against additional sharp increases in wellhead prices stimulated by direct, non-regulated sales of California source gas has proved to be the long-term contracts into which our companies have entered progressively since development of the described situation. These provide the dual advantages of preserving California gas supplies to all of our customers over a long period, and of stabilizing gas prices near the border price level. The long-term contract price, in using the border price formula, at least has the advantage of moving with prices regulated by the Federal Power Commission.

The oil industry headed by Western Oil & Gas Association and Oil Producers Agency, supplemented by statements of many individual companies, brought up many telling arguments in opposition to the proposals of the Commission staff. It was pointed out, with supporting detail, that such regulation would actually work against the public interest by discouraging exploration



Greetings from Halliburton
COMPANY · DUNCAN, OKLAHOMA

and forcing both taxes and consumer costs upward. Reference was made to the unsolvable problems encountered by the Federal Power Commission during the past seven years in regulating gas producers on the Federal level and the surety that similar problems would be found in California. Also that no other state had seen fit to pass such legislation.

Statements by Western Oil & Gas Association and Oil Producers Agency follow:

Western Oil & Gas Association Statement

State regulation of the price of natural gas in California's producing fields would not reduce the monthly gas bills paid by householders, the Western Oil & Gas Association told the Public Utilities Commission on December 5.

Turner H. McBaine, special attorney for WOGA, said that if such regulation were inaugurated it would actually work against the public interest by discouraging exploration and forcing both taxes and consumer costs upward. WOGA members represent about 85 per cent of the production of oil and gas in California.

McBaine presented WOGA's views at a hearing at the State Building in Los Angeles, where the Commission was conducting an investigation on its own motion into the production, storage, conservation, reserves, transportation, transmission and sale of natural gas in California.

"Regulation of producer prices would discourage exploration for, and development of, gas reserves — while free competitive prices will provide the incentive necessary to stimulate exploration and thereby assure maximum supplies from California and reasonable prices to the consumer," McBaine said.

He emphasized that the wellhead price of California gas is not a major factor in the California consumer's gas bill, pointing out that three-fourths of the gas used in California is imported and that of the one-fourth which is produced here, its wellhead price represents less than a third of its ultimate retail price.

"In other words," he said, "an increase in the wellhead price of California gas would mean an increase in only one-twelfth of the components going to make up the final retail price of gas to the California householder."

Reminding the Commission that the function of government regulation is to protect the public where there is a monopoly and no competition, McBaine emphasized that active competition among California producers "keeps the prices for California gas at the wellhead at or below fair and reasonable market prices."

More than 1200 California oil and gas producers are potential competitors for the 25 per cent of the California business not supplied by out-of-state gas.

McBaine pointed out that the price of California gas is generally lower than the price of imported gas. He said that the present imported gas costs about 40 cents per thousand cubic feet delivered in the market areas, whereas Pacific Gas & Electric Company buys California gas at an average price of 30 cents per thousand cubic feet, and in Southern California gas is bought at about 29 cents.

Thus, he said, California gas is undoubtedly less costly than imported gas at present, even allowing for the cost of transporting the California gas to the market.

He said the Public Utilities Commission exercises sufficient control over the gas utility companies to insure that they do not pay more than a fair market price for California gas.

"It must be remembered that if the producers were regulated, all of the enormous expense of regulation would be passed on to the public," McBaine emphasized.

"The producer's regulatory expenses would be a part of his 'service' cost which he would be entitled to recover, so they would be passed on to consumers in the form of rates. The expenses of the Commission and its staff would, of course, be paid by the public in taxes."

"In the long run, the only way to insure reasonable prices is to encourage the development of supplies adequate to meet the demand. No amount of regulation can do this if the producer and investor are not willing to risk the capital to discover and develop new gas reserves."

Oil Producers Agency Statement

Our position, simply, is that no public interest would be served by the regulation of producers of natural gas in this state.

Regulation of Rates

We assume that "rates" in this instance means more natural gas prices at the wellhead.

It is impossible to regulate the price of gas at the wellhead on any basis comparable with public utility rate regulation.

Natural gas producers cannot be classed as public utilities for the simple reason that they are not public utilities. They are producers of a commodity, natural gas, just as the producers of other commodities ranging from farm products to the multitude of other minerals are producers of those commodities.

Clear evidence that public utility rate regulation of gas prices cannot be made to work is furnished by the experience of the Federal Power Commission, which has found the problem of finding a fair and administratively workable method of fixing wellhead prices of natural gas to be insoluble. Various proposals have been made; the only result so far is that the Federal Power Commission is still searching for some method by which it can administer the authority given it by the Supreme Court in the "Phillips" case.

The time, effort, and expense that would be involved in attempting to make an unworkable program work cannot be considered to be in the public interest.

In addition to the fact that governmental control over wellhead gas prices has proved to be an insurmountable problem, there is no reason for government control of California gas prices. Competition now controls them; it will continue to control them.

California gas competes with out-of-state gas; it competes, for industrial use, with fuel oil; at some time in the future it may well be in competition with nuclear energy.

This competition has served the California consumer well.

Out of 20 cities for which the cost of residential gas is tabulated by the American Gas Association, there is only one, Kansas City, in which this cost is lower than in San Francisco, and only three (San Francisco, Kansas City and Cleveland) in which it is lower than in Los Angeles.

Then there is the fundamental question of the propriety of even considering the regulation of the price of a commodity in peacetime

under the traditional American competitive system. Such regulation is almost without precedent in this nation. Natural gas is the single exception, and the results that have flowed from this action have demonstrated that it is unwise, unsound, unworkable, and, to the extent that it has hampered the development of the resource, is detrimental to the public interest.

Natural gas is a commodity whose price should be determined by the competitive forces of the market, as is the case with virtually every commodity in use in the United States. Unfettered, these forces balance supply with demand. No one has yet advanced a convincing reason for making the production of gas an exception, and, as to it, abandoning the American competitive system.

Finally, regulation of the price of gas in California, as a method of controlling consumer costs, is futile.

Today, California-produced gas accounts for only about 25% of the total gas supply in the state. Projections of future demand indicate that, even with continued high rates of development of California gas, this percentage will decrease.

Service

We are not sure of the meaning of "service" as applied to the production of gas. If it means the quantity of gas to be sold, or the rate at which that quantity is delivered, its inapplicability to the business of producing natural gas immediately becomes evident.

In fact, the predictable result is that, by disrupting the present orderly conduct of the business, such regulation would be an actual disservice to the people of California.

In the case of natural gas produced in association with oil, the decision whether to make it available to utility companies for use as fuel, or to reinject it into the formation so that a greater ultimate recovery of oil can be secured, to use it as fuel in the field, or to make other use of it, depends upon complex engineering and economic factors.

So does the decision whether to use it as fuel rather than as a raw material for literally thousands of petro-chemicals.

These varying uses for gas brought about by economic and engineering considerations determine the quantity available for any given use. Upon what basis could a regulatory body determine which, or how many, were in the public interest and which, if any, were not?

Today, market forces guide these decisions. They are made by a competitive industry in light of the public's demands upon that industry. The public is, therefore, being served. Regulation can do nothing but disrupt this service.

Conclusion

The natural gas producing industry simply is not a public utility. Regulation of a public utility type is, therefore, completely incongruous. It is so incongruous that it cannot be made to work, as witness the difficulties now facing the Federal Power Commission.

Witness also the brief discussion here, which has clearly shown that the "rate, service, financing, certification" concepts of public utility regulation are completely foreign and utterly inapplicable to the business of producing natural gas.

This Commission is aware that projections of future need for gas in this state reach almost astronomical proportions. Thus it is imperative that all sources of supply, and particularly indigenous supply, be developed and made available in maximum amounts.

In the development of native California gas resources, the price received by the producer is a critical factor. Unless it is at a level which persuades the risk-taking individual or company that the promise of return makes the risk actually worth taking, the risk will not be taken, the gas resources will not be developed, and the possibility of a future shortage will be increased.

As we have shown, the price of California natural gas to the consumer under existing competitive conditions is low, and will continue to be held within reasonable bounds by continued competition. We have also shown that there is no need for regulation and that in the one instance where it exists, the public interest has been undermined.

These facts lead us to the firm conviction that Public Utilities Commission regulation of the natural gas producing industry is unnecessary, unwise, impossible of administration and because it would inevitably disrupt the existing orderly conduct of the industry, is diametrically opposed to the real interest of the consuming public: An adequate supply of natural gas for ever-increasing requirements.

Hearings were continued in San Francisco starting December 13th. There will no doubt be later hearings covering transmission of gas and sale of gas. Probably the discussion will continue for a long time. California oil men cannot assume that because most of those appearing are against regulation, legislation will not be introduced along these lines. Also there is Senate Bill No. 1268, favored by the gas utilities to look out for.

To guard against these unfavorable laws, the California oil industry will do well to express its opposition at every opportunity.

R. G. Greene, president, Great Basins Petroleum Co., left, shows location of his company's 200,000-acre natural gas leases in central California to Thomas P. Phelan, president, Pacific Coast Stock Exchange and Edward Calin, specialist. Great Basins common stock was listed on both the Pacific Coast and American Exchanges Dec. 5.

Seismological Oil Survey Voted By Commissioners

The Los Angeles Board of Harbor Commissioners November 22 voted to finance a $150,000 seismological oil survey of the area just inside the Port of Los Angeles breakwater and the area immediately outside, which is under the jurisdiction of the City Council.

General Manager Bernard J. Caughlin was directed to make this offer to the Council; along with the stipulation that, if eventually oil is produced in the Council-controlled area, the Harbor Department will administer it and receive all royalties from it for five years.

THE GRAPEVINE

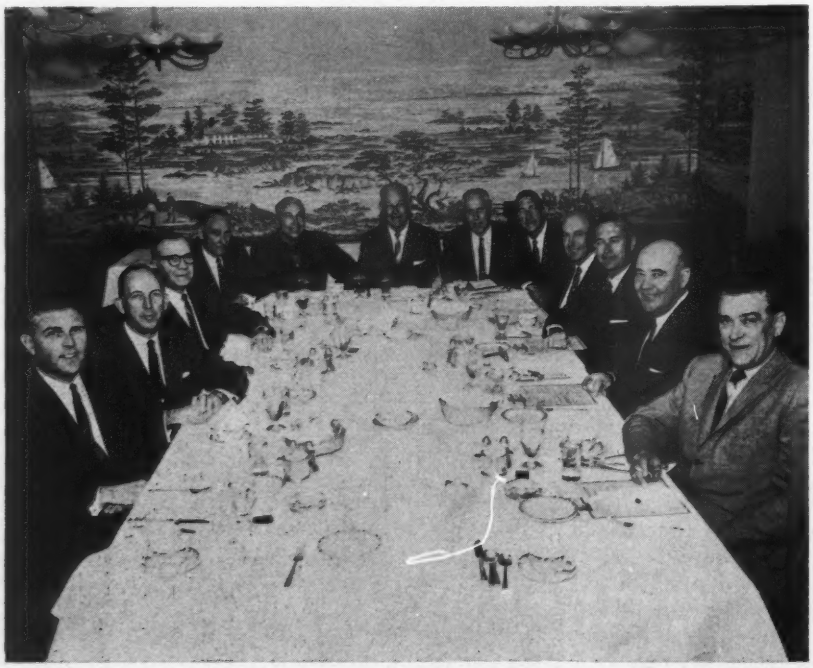
By RICHARD SNEDDON

The Pains of Proficiency

At various times in this column we have discussed the amusements and diversions of oil men largely up to the present dealing with indoor sports such as women, gin rummy, women, poker, women, dominoes, women, bowling, and women. There are, of course, other species of indoor frolic in which the petroleum people engage and upon these we shall dissertate, inanely, no doubt, at some later time. For the moment, however, let us consider briefly that great national pastime, golf, at least in some of its minor aspects. About twenty-five years ago, more or less, we had evolved into a regular Saturday morning golfer, a poor one it is true, but if there is one thing we have learned in a long and decidedly useless life, it is that experts never have much fun out of the thing in which they are expert. Good golfers, for example, live in deadly fear that they may find themselves coupled in a match with some dub like ourself. They are everlastingly worried about subtle and inexplicable changes in physical condition or routine motion that throw them off-center. They wring their hands and clutch their temples in a veritable agony of annoyment because they have suddenly developed a hook or a slice, are shanking the club, crooking their left arms, lousing up their backswings, or forgetting to follow through.

More Fun Being a Dub

At the time of which I speak these things that cause the experts to moan in exasperation, constituted our own normal performance and with Phil Rockfellow, Howard Said, Cash Belden, John Howell, et al, regularly every Saturday morning out at Griffith Park, Chevy Chase, or Sunset (at Burbank), we slashed our way through the underbrush with the keenest enjoyment. Cash Belden had a trick of genuflecting in the middle of his swing in consequence of which he dug up some of the largest divots ever seen. There was distinct danger, indeed, that he might one day be engulfed in one of his own excavations. Howard Said was the first shoeless golfer with whom we ever tangled. There was method in his madness, too. It wasn't because his shoes hurt that he discarded them; it was simply that when you are stomping around in the deep grass trying to find a lost ball you can feel it much better with your bare feet. To one who spends most of his time on the outer fringes of the course, this is a very important consideration. Phil Rockfellow's eccentricity was a fascination for trees. On one occasion at Chevy Chase, he hit the same tree four times and had to run like mad after each shot with his arms wound around his head to avoid being felled by the rebound. John Howell was really a pretty good player and we used to invite him to join our little group in the hope that it would make the rest of us feel ashamed of ourselves, but it didn't work.

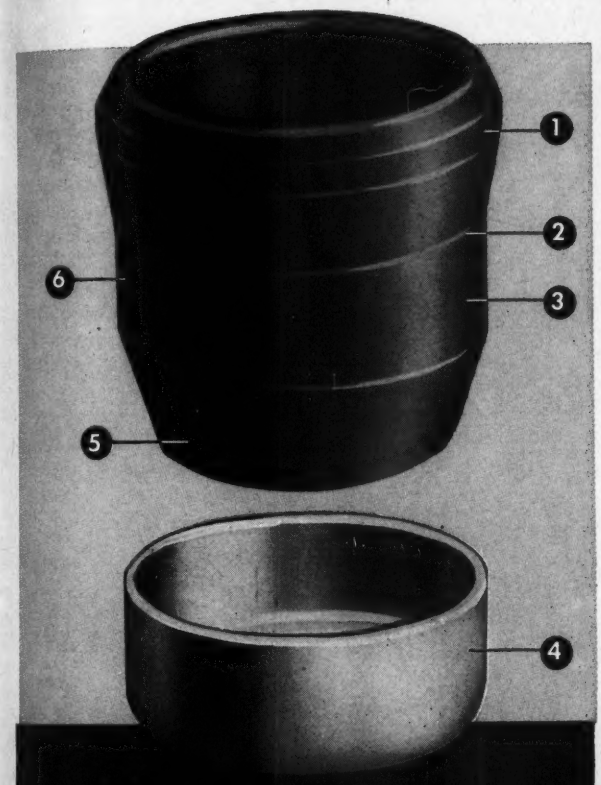


The new board of Directors of the Nineteeners, a local oil fraternity interested in golf and related activities, met at the Petroleum Club in Los Angeles this month with their newly elected president, Fox Boswell. Left to right: Jack Perrin, Carl Totten, Glenn Pitts, Harold Davis, Charles Perkins, Fox Boswell, Lev Sacre, George Trembley, John Fraser, Sam Patterson, Art Donnelly and Frank Shlemmer.

Waxing Poetic

We personally often secretly wished that we could develop the proficiency of an Ike Messenger, Chuck Berdrow, Jack Witter, Roy Hornidge, Lefty Beeson, Al Stevenson or Charlie Schriber, but we know now that if we had ever become as sharp as one of these fellows we would have missed a lot of fun. We don't mean to suggest that they didn't or don't enjoy the game, as the case may be, but theirs was an altogether different kind of pleasure. Once in a moment of mad-

GUIBERSON'S Improved GW PACKER CUP



1. Exclusive oversize flexible lips — full pipe contact on initial seal.
2. High-pressure seal — heavily reinforced, heavy cup wall.
3. Oil and gas resistant compound — designed for high pressures and temperatures and long life.
4. Steel thimble.
5. Internal seal prevents leakage between cup and mandrel.
6. Extra strength and rigidity — spring steel wire locked in metal bushing.

SEALS AUTOMATICALLY— STATIC OR MOVING

When your job calls for pack-off in pipe at any depth .. at high bottom-hole temperature .. Guiberson's GW cup is the cup for the job. It seals and holds high or low pressures in washing .. cementing .. pipe testing .. sealing off casing leaks .. remedial work and other production and testing applications.

This flexible-lip cup is a Guiberson development, made possible by Guiberson's long experience in designing and producing rubber products of exceptional value. It automatically gives a positive seal the instant its flexible lip enters the casing. It's built to hold high pressures .. the greater the differential pressure across a GW cup, the tighter it seals.

Guiberson's GW cups are available in standard, special, heavy duty and special heavy duty types in a wide range of sizes. Investigate these remarkable packing elements now .. have them on hand for your next job.

PRESSURE WASHING WITH GW CUPS

Two pairs of GW cups give *double assurance* of a tight seal with the high pressures used to clean out perforations and wash the formation face. Note the smaller diameter GW cup on the moving piston at the top of the tool.

THE GUIBERSON CORPORATION
DALLAS, TEXAS, U. S. A.

Better Safe Than Sorry — Guiberson

DRESSER INDUSTRIES INC.

PRODUCTION, DRILLING AND WORKOVER SPECIALTIES, MOLDED RUBBER PRODUCTS

OIL • GAS • ELECTRONICS CHEMICAL • INDUSTRIAL

Better be Safe than Sorry — go Guiberson

ness we wrote a poem entitled "Snedderhorn's Elegy, Written on a Public Golf Course," which will help the layman to understand the fundamental differences between the golf tyro and the golf pro. It went something like this: "Scarce falls the first faint flush of breaking day, ere some brash foursome mounts the starting tee; thence awkward carves its rude and tortuous way, leaving a trail of divot holes for me."

Apologies to Mr. Gray

"As soars the sod in somewhat briefer flight, a fairway shot snakes hissing through the air, then fades in graceful sweep far to the right, riding its festive arc no one knows where. Beneath a rugged elm in thicket dense, a frustrate lofter lurks, heedless of time, cursing his luck as eyes dart here and hence, seeking a jaded pill—long past its prime. Later from deep in yonder gaping trap, staccato helpings doth the ire proclaim of this same hapless and indignant chap whose mashie shot fell southward of his aim. With stiff left arm he flails the sand amain. The ether vibrates with his whirring strokes. The dust clouds rise, and falling rise again, until in speechless rage at last he chokes. For him no more the nineteenth hole discourse. For him no more the locker room debate. No more will he be threatened with divorce when he crawls home with tainted breath, and late. Could we restore, by some strange charm mayhap, to this poor carcass all its former zest, it would be cruel. Why his handicap was forty-five, so let the poor soul rest."

The Proper Garb

All the larger oil companies and associations have annual golf tournaments which bring out a great variety of players in some of the weirdest ensembles known to man. A few years ago at one of the Nineteener gatherings, the southpaw exponents, Paul Huggins, Charlie Perkins, and Henry Paulsen, all appeared in strange yellow and black outfits that made them look like a delegation of tiger-men from India. The conventional dress was at one time drab and colorless, consisting in a good many instances of old outworn and outmoded slacks, shirts, sweaters, socks, and shoes, that should have been given to the Salvation Army. Today, a golf tournament is a sort of fancy dress parade in which the participants may be attired in anything from the costume of a Swiss yodeler to the trappings of a Scottish highwayman. Mostly, however, the playing garbs are just a hodgepodge of high color, looking for all the world as if they were made from the materials on which some post impressionistic painter had been cleaning his brushes.

Real Life Adventure

There is real humor in the episodes and situations that develop along the way. Once we played at a Nomad whingding out at Riviera with Hal Howard of Howard Supply Company. Can't remember the names of the other players now but, anyway, on the back nine there is a short hole that has a deep trap right on the green. Into this Hal drove his ball and at the proper time he himself disappeared into the trap with a sand blaster. The top of his head could be seen briefly a couple of times as he sighted the hole and generally took his bearings. Then he went to work. After about five or six dull thuds, each accompanied by a miniature sandstorm, he peered over the rim and inquired blandly, "How far is it now?"

Putting Made Easy

One of the most humiliating of all golf strokes, even including the apoplectic stroke, is the putt. This has probably been the cause of more suicides than tumbling stock prices. It was making such serious inroads on national sanity in the late thirties that a couple of engineers out at Santa Fe Springs, to wit, Henry Grinnell (now deceased) and Pete Erwin, now living retired in Fairoaks, California, decided to do something about it. These budding Edisons put their heads together and out of the concussion came a gadget that literally

The precision putter with Pete Erwin at the controls.

reduced the precarious art of putting to the ease of absurdity. It eliminated every element of chance from what was commonly conceded to be one of the world's greatest gambles and was so precise in its action, indeed, that no one was expected to use the gimmick unless he was at least twenty feet from the cup. Anything inside that radius was "a give." The contraption was hailed, especially by the less expert players, as the greatest engineering achievement since the invention of the wheel (roulette, that is). It actually came within a scant ace of winning the Nobel Peace Prize. The only reason it didn't in fact, was that Nobel had never heard of it.

The Sordid Details

The precision putter was a trifle difficult of description, since it had no definite shape. It had the somewhat sloppy appearance of an unfinished jackstraw game and carried more extras than an auto supply salesman. The inventors claimed that it could be contained in an ordinary golf bag but they forgot to mention that it would have to be done with a scrap iron baler, and also forgot to suggest that it would likely come out of this experience looking somewhat changed. Although its makeup was rather complex, the operation of the automatic putter was fairly easy after one had read the instructions, especially if one had some vague idea about what the instructions meant. In any case, there is little room to doubt that for many hitherto clumsy exponents of the national pastime, the putting department was converted by this clever device from confusion to chaos and perhaps even vice versa. Here then are the instructions which, when considered in conjunction with the accompanying illustration of the gadget, will show how ridiculously simple or how simply ridiculous the process of holing out a golf ball can become when engineers get cudgelling their brains:

The Practical Application

(1) Wheel putter onto the green, paying no attention to hoots and catcalls. (2) Make sure no birds are nesting in any of the frame crotches, then douse liberally with lubricating oil from the reservoir to the left. (3) Address the ball; in other words, wiggle the machine about until the ball lies on a straight line between the putter and the hole. It will be difficult at first to decide which is the front end, but do not be discouraged —it took the inventors weeks to find this out. (4) Turn the direction-finder due north—the view is better. (5) Use level to set machine on horizontal plane but try to remain perpendicular yourself. (6) Observe temperature, (t) on thermometer at right, which reads in Ph D degrees. (7) Determine wind velocity (v) on gauge, checking with nearest meteorologist. (8) Employ automatic hand to estimate length of grass (g) and moisture content (m). (9) The resistance coefficient, it is hoped, will then be $\frac{t \times v.}{gm}$ (10) If the wind is in the north, what of it? A couple of snifters and you'll hardly feel it. (11) Find the angle of inclination by sighting through the telescope at the cup until eight people are behind you yelling "Fore!" Eight times four are thirty-two, which is the angle of inclination. (12) Calculate the force required to roll the ball into the hole by means of the abacus, thus: Extract the cube

"Triple Threat"
TO SUCKER ROD FATIGUE
1. JONES SUCKER RODS
2. JONES UNDERCUT PINS
3. JONES ROLLED THREADS
1
Rolled threads are stronger at the point where most pin failures originate . . . steel fibers and grain are rearranged to follow the thread contour, providing a dense structure at the critical thread root. Sucker rods with rolled threads make up tighter and stay tight because there are no high spots to beat down and cause the joint to loosen.
Undercutting the pin shank further increases fatigue resistance by eliminating the run-out thread and improving the elasticity of the joint.
Ask your Jones representative for further information on the "Triple Threat".
THE S. M. JONES COMPANY
Division of Buffalo Eclipse Corporation
General Office and Factory: TOLEDO, OHIO
Sales Office: Enterprise Building, TULSA, OKLAHOMA
California Distributors: HILLMAN-KELLEY
1000 Macy Street, Los Angeles 33
2
3
JONES
SUCKER RODS

root of the resistance coefficient eliminate all like terms, subtract the angle of inclination, add the juice of two bitter almonds, and if all of that tires you, lie down for awhile.

Summing It All Up

The rest was easy. Sound the Klaxon to warn all drifters to get out of the area, then with a slow, studious motion release the trigger at the top of the right shoulder. This sent a small metal pellet hurtling down the convolutions of the funnel onto a mouse trap. The springing of the trap was accompanied by the explosion of a powder cap and the unlocking of the putter shaft. The latter thereupon swung in an accurately controlled arc, sending the ball unerringly into the hole. Just in case not, however, a weeping towel could be found hanging on the left flank. The appeal of the precision putter will be evident at once to students of jet propulsion, barratry, and perhaps even laches and estoppel. When pictures of the device first appeared in the press they created an almost universal demand, but the Department of Justice refused to turn the inventors over to the demanders. Fortunately, before any further damage could be done, a kindly farmer took the precision putter home with him and it has since been doing yeoman service as a chicken roost.

Here and There

By way of news bits, we recently had a letter from our London correspondent, Glen Ledingham, in which he informs us that his good friend, Gus Pyre, is headed this way. He sends his and the family's regards to all his former associates and buddies over here and reports that all being well they will be in California for another sabbatical leave in the summer of 1962. Had another interesting evening at the Murder Club recently, again as the guest of Dee Taylor. Also on Dee's guest list were Neal Thompson, the Ken Corporation prexy, and Graydon Oliver, the well-known core analyst and domino sharpie. It was a very stimulating evening with Earl Hightower doing an excellent job of laying a foundation for a general discussion on foreign aid. On the same day, incidentally, hosted by Ted Miles, we attended Town Hall meeting at the Biltmore and heard Gerald Piel, publisher of the "Scientific American," contend that any kind of so-far projected civil defense in nuclear war would be about as useful as a broken leg to a racehorse. He especially scoffed at fallout shelters, which he claimed might have a remote value if bombs were exploded on the ground, but when they are exploded in the air as they undoubtedly will be in the future, shelters will be of little value.

More Spot News

Dutch Zwerneman is now vice president in charge of Texas operations for Western Navion, distributors of the new Navion Rangemaster and dealers in Hughes Copters and Shinn trainers. John Robinson of Houston Chemical is also a vice president and director of Western Navion, which is in the process of establishing dealerships in eight western states, including Alaska and Hawaii. Top placers in the LA Petroleum Club's one-night domino tournament at the end of November were Frank Ball, Don Grable, and Pete McArthur in that order. Congratulations by the way to Basil Kantzer, Sam Patterson and Bob Bauer, who have been nominated to the Board of Directors of the LA Petroleum Club! Bill Hendricks just walked in about the time we were reading a card he sent to us from Athens, Greece.

Caledonian Christmas

When the Yuletide season approaches, we always recall with painful nostalgia the simplicity of our boyhood Christmases in Scotland. My, what a thrill it was when December 24 finally crept around and we kids were allowed to stay up late, blunting the dinner knives, so that there would be some turkey left after the great feast. We hadn't yet adopted the German Christmas tree idea, and the decorations consisted of some bits of holly, placed where no one could sit on them, and a sprig of mistletoe tied to the gas jet in the hall. Mom always said there are many things you can do without at Christmas, but you simply must have the berries. Edison was still working on his electric light and our front room was a bit dull by today's standards. In fact, our most reliable source of illumination was Uncle Angus, who usually came to the family gatherings well lit. Uncle Angus was a typical Scot, a man of rare generosity; that is, he was rarely generous. He usually showed up in a kilt, a brilliantly burnished nose, and a slight list to starboard, adding a smidgen of excitement to what could otherwise have been rather a dull occasion.

And the Same to You!

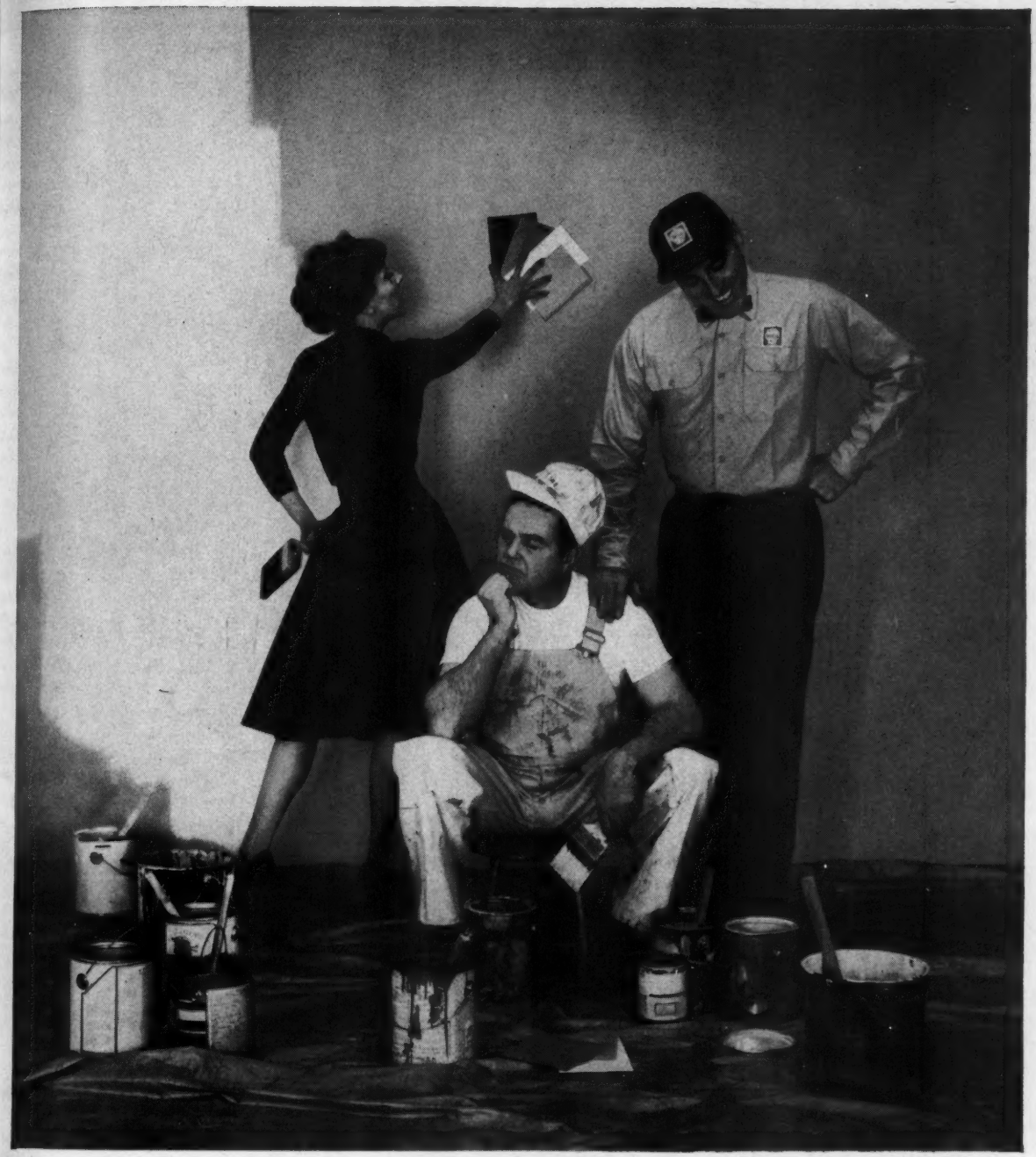
The practice of wrapping a shilling tie in four shillings worth of gi paper was then unknown, and on Christmas Eve we kids simply hung our cotton stockings on a string over the fireplace and opened the window. Later, Sandy McLaus, the Scottish version of Saint Nicholas, came in somewhat unsteadily—we suspect it was really Uncle Angus again—and stuffed the stockings to overflowing with such goodies as a celluloid collar, two armbands, two garters, a nice red apple, and a bright new penny. Can you imagine Santa Claus getting away with anything like that now? Why, if he doesn't cough up a convertible or at least a snipe boat, Junior is liable to drop some ground glass in his reindeer food. But families were both poor and large in the good old days. Our dad was a fine old Scottish lowlander and we had six brothers who didn't spend any money either, so gifts were either modest or minus. The dinner was the big affair. To this all the relatives came, conversation was king, and the wine flowed like mucilage. We pulled crackers; read our fortunes on the little printed slips, donned paper hats and had what we thought was a whale of a time. If one of the more erudite members of the clan expressed a frightening belief that the next war would be fought on bicycles, Mom promptly shushed him up. It was all very naive but also very enjoyable, and it concluded on a wave of good fellowship as we separated, wishing each other as we personally also wish all our readers now, A Merry Economical Christmas and a Happy Inexpensive New Year!

Tretolite Company Re-names Emulsion Preventives

BOTOL is the new name given to Tretolite Company's fuel emulsion preventives. A new package design of black and silver replaces the former red and white drum.

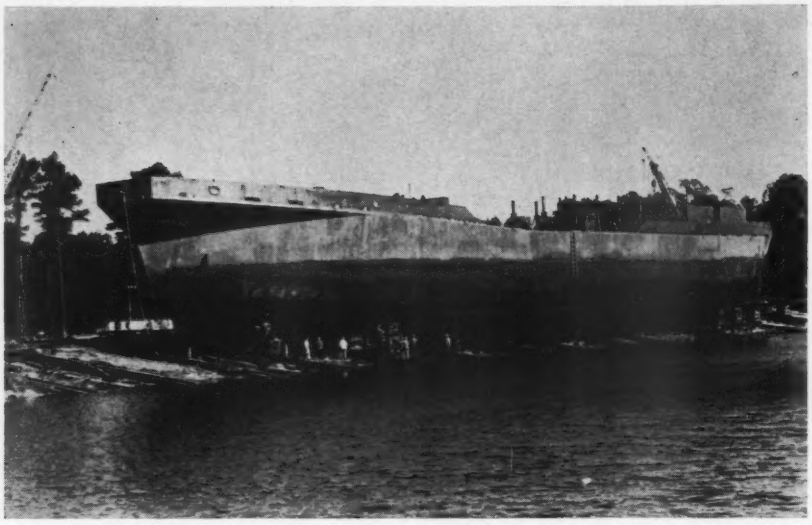
Previously identified as FEP Compounds, BOTOL formulas are used in tanker cargoes and storage tanks as demulsifiers, desalting agents, and emulsion preventives.

For additional information on BOTOL Fuel Emulsion Preventives and their application, write Tretolite Company division of Petrolite Corporation, 369 Marshall Avenue, St. Louis 19, Missouri.



The oilman paints a "dream" house — When the lady finally makes up her mind, she can be sure her choice is a good one. Solvents from petroleum will give her the paint job she wants, and keep her new home beautiful for years and years to come. Long-lasting finishes for home and industrial use represent another achievement of petroleum research — and another note of thanks the consumer owes to you, the oilman. If you hear someone criticizing oil, you've good reason to speak up in return. The thousands of products derived from petroleum are proof that you've helped to make it one of the world's most versatile natural resources.

SHELL OIL COMPANY



BIGGEST YET—The world's largest open-sea drilling vessel, Global Marine's CUSS II.

Launch World's Largest Drilling Ship

The world's largest drilling ship has been launched in Lake Ponchartrain, Louisiana, and will go into service for Global Marine Exploration Co. in January.

CUSS II, a 5500-ton, 268-foot ship slid down the ways at Madisonville, Louisiana, as the first major drilling ship ever designed from the hull up for open sea drilling. Global Marine will put it into service as a contract vessel for petroleum exploration in the Gulf when outfitting is completed.

Robert F. Bauer, president of Global Marine, said CUSS II will carry 15,000 feet of drill pipe initially, but will be able to drill deeper when required. He said CUSS II was specifically designed for drilling in more than 200 feet of water and drilling to depths of 14,000 feet and more.

CUSS II will have almost twice the capability of her predecessor ship, CUSS I, which Global operates off the Pacific Coast and which was the drilling vessel for the now-famous "Operation Mohole" test coring off Guadalupe, Mexico, early this year. CUSS II carries about twice as much drill pipe as CUSS I, has nearly twice the displacement, and has greatly increased storage and material handling facilities. The ship will be able to handle triple lengths (90 feet) of drill pipe horizontally on her special pipe racks, according to Bauer.

He noted that CUSS II will be more stable in heavy seas than CUSS I, a converted Navy barge. The new ship will have a special anchoring system that will allow rotation of CUSS II 140 degrees while drilling operations are underway. This will allow keeping the bow or stern headed into the sea and will minimize roll in heavy weather.

Diesel-electric power will be employed throughout, to power the rotary table and drawworks, and to provide electricity for pumps, air-conditioning, and cooking. Provision is also made for future self-propulsion using electric motors on twin screws.

Equitable Equipment Co. of Madisonville is building the ship for Global Marine. Construction has been underway since August, and was preceded by exhaustive water tank tests.

Global Marine, which undertakes offshore drilling, marine engineering, oceanographic, and research projects throughout the world, is headquartered in Los Angeles.

Signal Acquires Century Oil

Properties and assets of Century Oil Co. have been acquired by Signal Oil and Gas Co., it was announced by Samuel B. Mosher, chairman of the board. Century operated a refinery on property adjacent to Signal facilities in Long Beach, Calif. and a small chain of service stations in the Los Angeles area.

Production Brought in In Australia

An exploratory well in Queensland, Australia, flowed 48 gravity crude oil at the rate of 250 barrels a day during a 74-minute drillstem test, it has been announced by Union Oil Company of California and its partners, Kern County Land Company and Australian Oil and Gas Corporation.

The wildcat, Union-Kern-AOG Moonie 1, is located 200 miles west of Brisbane, Queensland. It is the third of three such wells drilled so far. The first produced at the rate of 60 barrels a day. The second was abandoned.

The discovery is encouraging but it is too early as yet to evaluate its potential, the companies said.

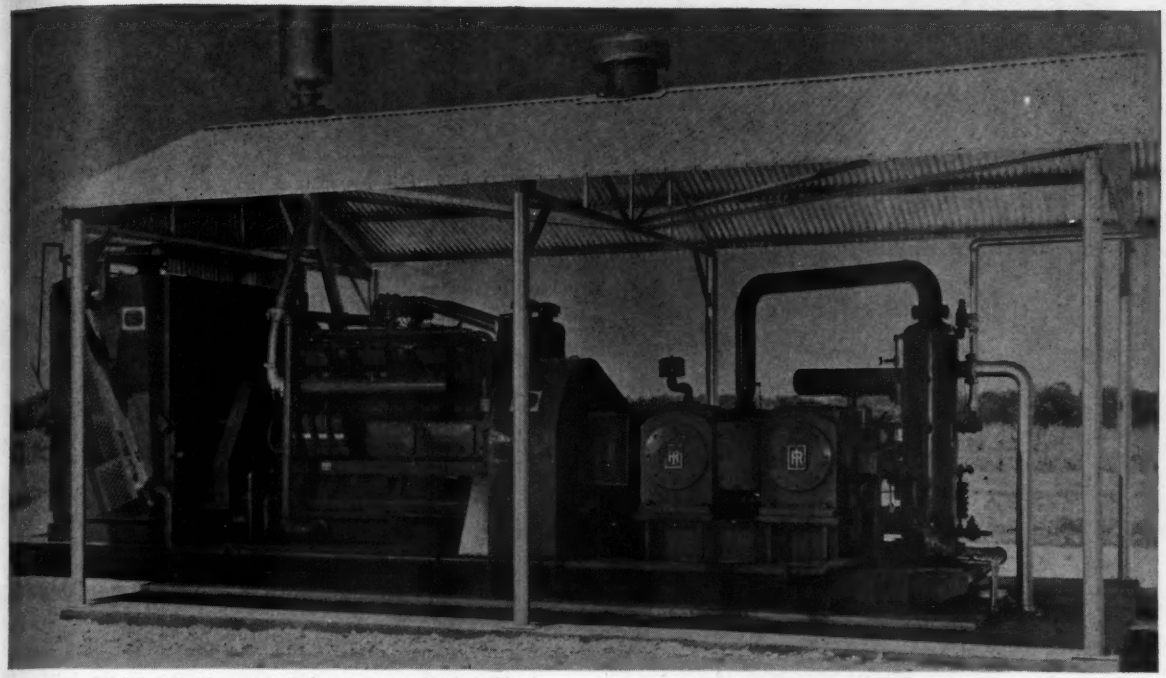
The drillstem test, according to Union Oil, was made of an interval from 5816 feet to 5925 feet. The well started flowing after 19 minutes of the test period and flowed at the rate of 500 barrels per day, half of which was oil and half water. About 400,000 cubic feet of gas per day was estimated.

The three-company partnership said it plans to continue drilling to examine additional objectives below 6500 feet, after which casing will be run and sustained production testing will be undertaken of all potentially productive zones, including an attractive sand unit between 5640 and 5690 feet.

New Wire Rope Sling Product Announced

The Wire Rope Corporation of America has begun to merchandise a new wire rope sling product. Known as Super Flex slings, this new line of multipart wire rope slings is something completely new on the market. It is a patented item that for the first time offers sling users the most flexible multipart sling on the market today.

The Super Flex line of slings has taken three years of designing and testing to perfect. It is now available throughout the United States. Complete literature and details are available from the Wire Rope Corporation of America, Inc., St. Joseph, Missouri or any of its branch offices/or the local WIRECO distributor, 1018 S. Santa Fe Ave., Los Angeles 21, California, MA. 7-6356, or L. P. Sacre at RA. 3-8451, for further information and/or catalogs.



500 H.P. Caterpillar engine, driving compressor, boosts well head pressure from 300 psi to 900 psi for gas pipeline distribution.

these SECO leased "CATS"®

work for "PEANUTS" on all power requirements!

GAS COMPRESSION

• PUMPING • DRILLING
• WATER WELLS • WATER FLOOD
• GAS COMPRESSION
• PIPE LINE PUMPING • COTTON GINS
• FIELD GENERATORS

WATER WELLS

NO CAPITAL INVESTMENT, NO INSTALLATION COST, NO MAINTENANCE

No power matches the economy of SECO LONG-RUN GAS ENGINES! You use the fuel right under your feet, part of your everyday production. Or run these engines from any gas distribution pipeline.

COTTON GINS

FIELD GENERATORS

DRILLING

Total expense, including *monthly leasing fee, installation, and complete maintenance,* costs only 5 to 8 mils per HP/hr!—*40% cheaper than your present electric bill!* Further, you save the investment in capital equipment and eliminate all need for maintenance crews and equipment attention. SECO furnishes this service as part of its lease agreement.

OUTRIGHT PURCHASE—If you prefer to own your engines outright, power costs drop to 4 to 6 mils per HP/hr.; 50% cheaper than electricity!

WHATEVER YOUR POWER NEEDS—Call SECO for full data on gas engine leasing or purchase. Handy SECO offices in principal oil producing areas insure efficient installation service and regular maintenance with trained crews. *Here is a proven way to cut operating costs with complete dependability plus many other advantages!*

Heavy-duty "CAT"® gas engines can be supplied on lease or purchase in power ranges from 150 to 500 H.P. for any application requirement. SECO also supplies M-M gas engines from 10 H.P. to 100 H.P. continuous.

PIPE LINE PUMPING

Write for cost comparison data showing savings of SECO engines vs. your present power system!

SHRIMPTON MANUFACTURING & SUPPLY CO., INC.
Sales & Service

OILFIELD SERVICE

SECO SERVICE COMPANY, INC.
Leasing
5400 Jillson St., Los Angeles 22
RAymond 3-6549
VENTURA • BAKERSFIELD • ODESSA, TEXAS

FOREIGN OPERATIONS — WESTERN OIL COMPANIES

CALTEX IN INDIA

When American oil companies become active in foreign countries, a spectacular improvement in the economic and social conditions in these countries has often resulted. This is usually the result of important oil discoveries, which in turn enrich the government, allow for public works, schools, employment of nationals and so on.

A somewhat different situation, but with similar results, in a way, is outlined in a story on "Caltex In India" in the Caltex quarterly magazine for the fourth quarter of 1961.

The story points out that throughout the company's long history in India its technical services and knowledge of specialized product applications have no doubt made as valuable contributions to the country's industrial growth as the products themselves. For in this predominantly agricultural land, many of the steps along the road to industrialization have been initial steps. At one time or another, the new cement plant, the new cable factory, the new automobile assembly plant, have been the first of their kind in all India. At such times, Caltex lubrication engineers have given valuable assistance in determining the proper lubricants for new and unfamiliar machinery, in setting up suitable maintenance schedules, and even in helping to train the men responsible for its care.

Often enough, even today, when Caltex engineers answer a call for assistance, the expectation of actual new business is remote.

India, which has been known since the beginning of recorded history, has a population of about 430,000,000, one-seventh of the entire human race. Today, India is politically unified, having attained her independence in 1947 and full status as a republic within the British Commonwealth in 1950. She is now entering on her third and most far-reaching five year economic plan and making long strides toward self-sufficiency. Caltex (50% Standard of Cal) has been an active and interested participant in the country's development since 1937 and through its predecessor company for many years before that.

Its facilities today include marketing organizations based in Bombay, New Delhi, Madras and Calcutta, and serving all of India. It has twelve ocean terminals, strategically situated to serve both international and coastwise shipping, also many inland bulk depots and thousands of retail outlets. An affiliated company operates Visakhapatnam Refinery, situated at the port of that name on the Bay of Bengal and serving the needs of Andhra Pradesh and adjacent regions northward to Calcutta.

Of course the industries which are traditionally Indian, such as the jute mills of West Bengal, the tea plantations of Assam and the many widely scattered sugar and textile mills look to Caltex for advice and assistance with technical problems, in addition to dependable petroleum products.

It is however in the new fields opened up by the various five-year plans, that such service has been most valuable.

Caltex is especially proud when it can serve and be an active participant in such vast projects as the Bhakra-Nangal Hydro-electric Scheme in the Punjab, and its counterpart in the east, the Hirakud Dam in Andhra Pradesh, the world's longest. Such projects bring lasting benefits to many millions, and power for the industries that are certain to spring up beneath the humming wires overhead.

Caltex also was called upon to formulate a special larvicidal oil for the government's Anti-Malaria Institute and the Indian Army.

Up and down the growing list of industries and enterprises that are building the "New India" there are many examples of Caltex assistance and participation. A few might be mentioned to show the variety.

1. Northern Railways diesel fleet.
2. Locomotive works at Chittaranjan.
3. New rubber factory of Synthetic & Chemicals Ltd.
4. Industrial and textile machinery plants.
5. Hindustan Motors Ltd. in Uttarpara largest automobile producers in India.
6. Hindustan Aircraft Ltd. in Bangalore largest aircraft manufacturer in the East.
7. Mahindra and Mahindra, Ltd. of Bombay producer of "jeeps".

These are but a few of the dynamic projects and bold enterprises that are changing the face of India today and only a sampling of the many ways in which Caltex is assisting in their progress. Caltex like all responsible organizations in India's business community looks with great anticipation for the success of the country's Third Five Year Plan, and for the fulfillment of many of her cherished goals in agriculture and industry.

And what has been said here of Caltex and India could be duplicated many times about other companies and other countries. It is a good record and one of which any American may be proud.

News From Arabia

The Sonic, 158 ft. specially designed and equipped sea-going vessel, began a program of off-shore seismological exploration for Aramco recently. The craft is operated by Geophysical Services Inc.

This is part of Aramco's continuing effort to evaluate all its concession areas.

The company has engaged in intermittent offshore seismic work since 1949 and gives part credit to this method for its oil discoveries at Manifa and Safaniya.

Trailing a 2,700 ft. seismometer cable at a speed of six to eight knots the Sonic can cover about 55 miles a day while making seismic records every two minutes. Her six foot draft permits explorers to work in shallow depths.

Seismic data is recorded magnetically on special high-fidelity equipment aboard the Sonic and sent to G.S.I. Laboratories to be processed electronically. This procedure gives more detailed information on underwater structures in Aramco's offshore concession than has previously been made available by geophysical means. Two thousand miles of line is being surveyed.

First Natural Gas Sale Made

The Saudi Cement Company, which started cement production in November, became the first domestic purchaser of natural gas for industrial purposes in Saudi Arabia. A ten year contract was signed with

Aramco for gas for their plant.

The contract calls for a maximum amount of 3.6 million cubic feet of gas daily. This amount provides energy for the production of 300 tons of cement per day, which is the current maximum capacity of the plant.

The plant is located half-way between Abqaiq and Hofuf.

The gas is shipped from the Shedgum area through an 8 inch pipeline which was laid by the cement company for a distance of about 8 miles to the plant.

In addition to the gas, which provides energy for firing the kiln and clay drying, Saudi Cement Co. is also purchasing Diesel oil for use in generators which furnish electricity for the plant and the employee housing area.

13th Aramco-built School Completed

A program of building schools for sons of Muslim and Arab employees was started in 1953 under an agreement between the Saudi Arab Government and Aramco. The first school was opened at Dammam in 1954. The thirteenth was recently opened at Hofuf. There are eleven elementary and two intermediate schools with a total capacity of 3600 students.

The schools are designed, built and equipped at Company expense, are turned over to the Saudi Arab Ministry of Education and become an integral part of the Saudi Arab Government's school system in the Eastern Province where Aramco operates.

The Company pays for operating and maintaining the Aramco-built schools, including the salaries of the teachers and administrative staffs. The Ministry of Education has full responsibility for determining the curriculum, selecting the textbooks, appointing the teachers and supervising the schools.

New President for Iricon

Garth L. Young who continues as Vice President in charge of foreign operations for Signal Oil and Gas Co. has been elected president of Iricon Agency Ltd., succeeding E. M. Benson, Jr. of Richfield Oil Corp.

Iricon's share of the consortiums 5% interest of eight subsidiaries and affiliates of independent U.S. oil companies in the Iranian Oil Consortium.

The companies are American Independent Oil Co. of Iran, Iran Atlantic Oil Co., Pacific Western Iran Ltd., Richfield Iran Oil Co., San Jacinto Eastern Corp., Signal International, Sohio-Iran Trading, Inc. and Tidewater-Iran Inc.

Iricon's share of the consortuims daily production has increased to 57,000 barrels daily in 1961 compared to 17,500 barrels a day in 1955. Headquarters are in London.

Above, highly qualified Egyptian welders—with an audience of local roadside engineers—work on one of the three lines that will soon supply heating oil and kerosene to industry and consumers throughout Egypt.

Russ May Drill Their Own Mohole

Soviet scientists have proposed a plan to probe the earth's interior to a depth of 6 to 9 miles at 5 widespread locations within the USSR.

Meeting at the Ministry of Geology, the scientist suggested large-scale drilling operations at the Caspian Sea, Ural Mountains, Caucasus Mountains, the Kivile Islands off Siberia and Karelia in Northwest Russia.

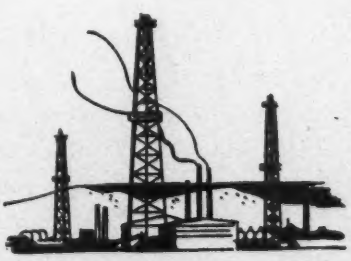
Drilling near the north shore of the Caspian would reach a depth of 7 to 9 miles. The operation is expected to establish the lowest limit of petroleum deposits occurring predominantly in sedimentary rock formations, according to a Soviet spokesman.

The drilling operation at the volcanic Kuriles is designed to match the United States Mohole Project.

NPC to Study Soviet Oil Shipments

The National Petroleum Council, holding its second meeting under the Kennedy Administration, agreed to undertake an emergency study of Russia's intrusion into the oil markets of the free world, reports Frank Rogers, WOGA's Washington, D.C. representative.

Acting quickly after a request for the study was made by Assistant Secretary of the Interior John Kelly, the Council set up a special committee headed by J. Ed Warren, president of Cities Service Co. Sixteen other members are expected to be named soon. The group will not limit its work to digging out the facts relating to Russia's oil exports, but will also give "comments" and "conclusions" in its report to Secretary of the Interior Stewart L. Udall.



TOO MANY PULLING JOBS?

CONTINENTAL HAS THE ANSWER.. *Worldwide!*

D+B
Thru
pump
sand
barre
strok
three
probl
are s
varia
D+B
Call
for th
has t
pump
you
at th
cost

CO

CONTIN
The You
General
Export
CALIFO
Termina
CALIFO
Los Ang
Dikale,

D+B Heavy-Duty Stroke-Thru bottom-hole pumps sweep all paraffin, sand and gyp out of the barrel with each plunger stroke. These are only three of the many well problems D+B Specialists are solving with the 700 variations of 37 basic D+B pump designs. Call Continental — ask for the D+B man. He has the experience in pump application to help you get production at the lowest possible cost for the long run.

CONTINENTAL EMSCO

CONTINENTAL-EMSCO COMPANY, a Division of The Youngstown Sheet and Tube Company
General Offices: Dallas, Texas
Export Office: New York, New York

CALIFORNIA DIVISION OFFICE: P. O. Box 54008, Terminal Annex, Los Angeles 54, California
CALIFORNIA STORE LOCATIONS: Long Beach, Los Angeles, Santa Fe Springs, Bakersfield, Oildale, Taft, Ventura, Wilmington Pipe Yard

Statement of Alvin C. Hope, President, Independent Petroleum Association of America on Imports

Both national security and economic growth are threatened by President Kennedy's decision to postpone action necessary to assure adequate supplies of oil and gas. After comprehensive investigation and lengthy study of the defense program as to oil imports, the President has created uncertainty by announcing further delay until mid-1962.

In contrast, Russia is ahead of schedule in her plan to increase greatly U.S.S.R. output of essential petroleum supply. Russian oil is a primary weapon in the Soviet economic offensive. Other nations, such as Canada, are pursuing vigorous and successful policies to expand oil and gas production.

The U. S. petroleum industry is not vigorous and is not expanding. Oil prices have been depressed far below the cost of finding and developing needed reserves for defense mobilization.

The evidence is clear and compelling that the Government's oil import program must be improved and strengthened. While the import program prevented complete chaos in the domestic industry, two and one-half years of experience leave no doubt that further action is imperative in the interest of national security. The further delay proposed by the President is unnecessary, unwise and unacceptable.

The Independent Petroleum Association of America has called an emergency meeting of its Import Policy Committee to determine necessary steps and courses of action to correct this intolerable situation and restore our national security as to essential petroleum supplies.

Statement on Oil Imports By Stark Fox, Executive V.P. of Oil Producers Agency

"The postponement of a decision on the oil import program by President Kennedy leads me to the belief that the President refuses to come to grips with reality," said Stark Fox, executive vice president of Oil Producers Agency of California.

"While it has been, and still is, our position that the program in District V is basically sound, needing to be strengthened principally by recognition of the part that excessive inter-district shipments play in the determination of the quota and by proper calculation of exempt Canadian imports into the District, nevertheless, it is apparent from all industry statistics that a reduction in nationwide imports is imperative.

"President Kennedy's failure to act upon clear and persuasive evidence makes it incumbent upon the industry to take all possible steps to strengthen the program, not in its selfish interest, but in the interest of the nation's security."

Occidental Petroleum Corp. Acquires Signet Oil & Gas Company

Occidental Petroleum Corporation has acquired all the outstanding capital stock of Signet Oil & Gas Company of Denver, Colorado, together with the interests of many of Signet's participating interest-holders, it was announced by Dr. Armand Hammer, president.

The acquisition includes various portions of the working interest in 12 producing gas wells on the Mc Mullin Ranch gas field in San Joaquin County, California, which are equivalent to approximately 40% of the working interest in all wells in the field.

Occidental has also acquired various portions of the working interests in 21 wells located in Kimball, Banner and Cheyenne Counties, Nebraska, and Logan County, Colorado.

Sales from natural gas and oil from these properties acquired from Signet and its participants will give Occidental a net cash flow of approximately $800,000 a year of which approximately $575,000 is from gas sales to the Pacific Gas & Electric Company from the Mc Mullin Ranch field.

The acquisition involved the issuance to Signet shareholders and certain of its participants of 213,302 shares of Occidental common stock plus approximately $1,000,000 cash.

Signet will be operated as a wholly-owned subsidiary of Occidental and will mark Occidental's entrance into the Rocky Mountain area which the company considers will be second in importance to its Sacramento Valley, California, properties with respect to future natural gas developments.

PPP Luncheon Club of Long Beach

Election of officers for the year 1962 took place at the regular monthly meeting of the Petroleum Production Pioneers Luncheon Club of Long Beach, held at the Petroleum Club of Long Beach, Wednesday noon, November 15, 1961.

Unanimously elected by the more than 80 members present to direct the operations of this fast-growing organization for the coming year were: Floyd E. Vaughn, Chairman; Raymond E. Paxton, Vice Chairman; Forrest C. Holdeman, Secretary-Treasurer; Mitchell O. Dion, Jr., Sergeant-at-Arms.

Floyd E. Vaughn

Vaughn, currently Treasurer and a director of the parent PPP organization, has been an energetic worker in the Long Beach Club since its formation in 1960 and is well qualified to continue the exemplary leadership displayed by his predecessor, Floyd York. York automatically falls heir to the chairmanship of the Advisory Committee presently held by Wm. "Andy" Anderson. Ray Paxton, who was elected to the important vice chairmanship, has also served his Club well since its beginning, the current year as Sergeant-at-Arms. Holdeman was re-elected to the Secretary-Treasurer's office undoubtedly due to generous blue figures in the account books, and "Mitch" Dion moves up from an Assistant Sergeant-at-Arms well seasoned for the duties of his elected position.

The Long Beach PPP Luncheon Club meets the third Wednesday of each month at noon in the Petroleum Club, 3636 Linden Avenue, Long Beach. All PPP members and their guests are cordially invited to attend.

Don Kirby Joins WOGA Staff

Don Kirby, formerly public information officer of the recently dissolved Air Pollution Foundation, has joined the staff of WOGA as public information representative.

Kirby was with the Los Angeles Daily News for more than 12 years. He is a member of the Public Relations Society of America and a charter member of the Greater Los Angeles Press Club.

Standard's Hartsook and Sheridan Address D & D of San Francisco

Edmund A. Hartsook and George T. Sheridan of the Standard Oil Company of California addressed the regular dinner meeting of the Desk and Derrick Club of San Francisco on Wednesday, December 13 at Camille's. They told "The Huntington Beach Story." Plans were announced recently for a multi-million dollar development of that company's real estate holdings in the area.

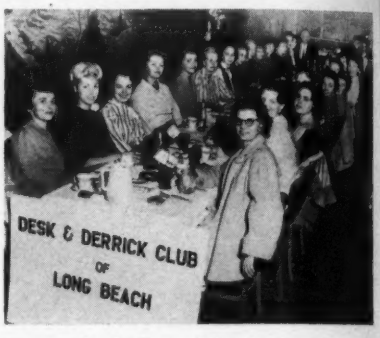
Mrs. Lucy Johson of the Ethyl Corporation was installed as president of the Bay Area club for 1962 by Dorothy Stewart, Program Chairman of the National Association. Other new officers are:

May Barbano (California Research Corp.) 1st Vice President, Thelma McLaughlin (American Bitumuls & Asphalt Co.) 2nd Vice President, Helen Zbikoski (Reserve Oil & Gas Co.) Corresponding Secretary, Deanna Brophy (California Research Corp.) Recording Secretary, Edna Barber (Standard Oil Company) Treasurer, Florence Patton (Pexco, Inc.) and Marie Bottaro (Standard Oil Company) as Directors, and Mrs. Mary Emrick (Standard Oil Company) as Immediate Past President.

Field Trip for Desk and Derrick Club of Long Beach

On November 30th, twenty-eight members of Long Beach Desk and Derrick Club enjoyed a field trip aboard the Richfield Oil Corporation tanker, "Cuyama Valley" at berth in Long Beach harbor.

Conducted by Richfield's employees, members were shown the engine room, crew's quarters, officers' quarters, dining salon and chart room. Each guest viewed the wheel house and was allowed to look into the radarscope.



Steak dinner following tour.

One of the largest in the Richfield fleet, the 720-foot "Cuyama Valley" holds 32,500 barrels of crude oil. Operating cost per day is estimated at approximately $5,000.

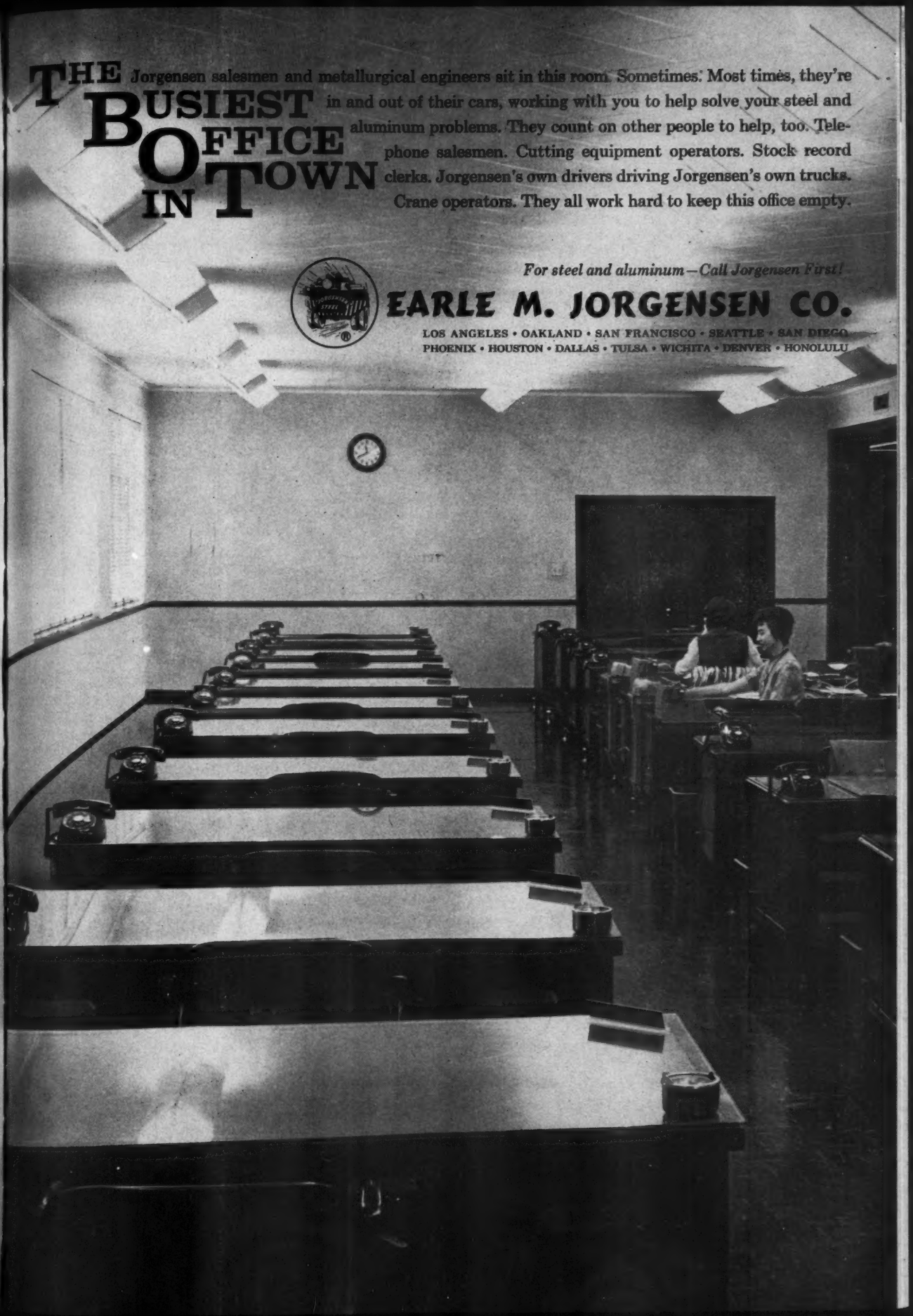
At the conclusion of the tour, club members were treated to a steak dinner at a nearby restaurant. Captain Woefel of Richfield Oil planned and conducted this most enjoyable and informative tour.

Symposium Papers Solicited by API

The West Coast Section of The American Petroleum Institute Subcommittee on Waterflood Microbiology is soliciting papers for its biannual symposium, which will be held December 4th and 5th, 1962 at the Lafayette Hotel, Long Beach, Calif.

The subject of the symposium is limited to microbiological problems found in petroleum production.

Anyone who has or will have work to report is invited to submit an abstract of the paper to the Program Committee for consideration by March 1, 1962.


THE BUSIEST OFFICE IN TOWN
Jorgensen salesmen and metallurgical engineers sit in this room. Sometimes. Most times, they're in and out of their cars, working with you to help solve your steel and aluminum problems. They count on other people to help, too. Telephone salesmen. Cutting equipment operators. Stock record clerks. Jorgensen's own drivers driving Jorgensen's own trucks. Crane operators. They all work hard to keep this office empty.
For steel and aluminum—Call Jorgensen First!
EARLE M. JORGENSEN CO.
LOS ANGELES • OAKLAND • SAN FRANCISCO • SEATTLE • SAN DIEGO
PHOENIX • HOUSTON • DALLAS • TULSA • WICHITA • DENVER • HONOLULU

Frost Engineering Appointed California Representative For Industrial Silencer

W. A. Carroll, Jr., manager of marketing, announces the appointment of the Frost Engineering Service Company as sales and engineering representatives in California for the Industrial Silencer Division of the Burgess-Manning Company.

The Frost Engineering Service Company has offices at 7537 Marbrisa Avenue, P. O. Box 767, Huntington Park, California, to serve its customers in the Los Angeles area and southern California.

For northern California and the Bay area, Frost has offices located at 383 Fourth Street, San Francisco and under the direction of Donald L. Bracken.

The Frost organization is headed by Vernon Frost. Members of his staff at Huntington Park include Jack Crawley, office engineer, John Stevens and "Woody" Wood, sales engineers.

The Burgess-Manning Company are leaders in the field of sound control and pulsation dampening and have their headquarters in Dallas, Texas, at 9207 Sovereign Row.

Mining Board Holds Hearing On Proposed Well Data Library

The State Mining Board held a public hearing on Dec. 14 in Los Angeles to consider the proposal of Dr. Frederick A. F. Berry, University of California, to create a well data library in California.

Dr. Berry proposes that the California Code be so modified that all original data, "such as all logs, accurate and truly complete well histories, cores, drill cuttings, water samples, chemical analyses, pressure and temperature measurements, etc.," obtained from all wells drilled from the surface of the earth to depths over 500 feet would be filed with some state agency. These well data would not be available to the public, except upon written release by the operator, within a two-year period, at the expiration of which all such data would be available for inspection, study, and reproduction by the public.

Petroleum industry views were requested.

Yoloy Pipe Bests Wrought Iron In Steam Return Line Corrosive Test

A two-year test by The Youngstown Sheet and Tube Company to determine the relative behavior of the company's Yoloy pipe versus wrought iron pipe in steam condensate return lines demonstrates a superior corrosion resistance for Yoloy.

Results of the test, conducted under actual service conditions in a factory building, show a weight loss of 3.57 per cent for the wrought iron pipe and only .27 per cent for the Yoloy pipe.

Summary of the test is contained in a small brochure that may be obtained from Youngstown pipe distributors or by writing The Youngstown Sheet and Tube Company, Department 19, Youngstown, O.

Mobil Oil Co. Moves Exploration Headquarters to Los Angeles

Exploration functions of Mobil Oil Company in California, presently headquartered in Bakersfield, will be consolidated with other exploration activities in the company's west coast offices in Los Angeles, effective December 31, according to H. D. Hobson, division exploration manager. "Our emphasis in the search for new petroleum reserves is shifting to other areas," Hobson said.

Senior employees in the Pacific District offices in Bakersfield will be offered transfers to Los Angeles or to other divisions of Mobil Oil Company.

The centralization move will not affect Mobil's producing operations in the Valley. According to the San Joaquin District Producing offices in Taft, Mobil has drilled 94 new development wells locally this year. In addition, the district launched a secondary-recovery program in the Midway-Sunset field early this year. The project, involving underground combustion, is the largest of its kind in California.

WANT DRILLING

On substantial acreage in Kern County. Near production, good geology and other favorable indications. Reply to California Oil World, Box 300.

World Oil Investments By Chase Manhattan Bank

Combined capital expenditures by the free world petroleum industry dropped to $10.5 billion in 1960 as compared with $11.1 billion in 1959, according to a study issued by the Chase Manhattan Bank.

The outlay for replacement and expansion of property, plant and equipment by the industry between 1951 and 1960 totaled $90 billion, of which $52 billion was made in the U. S., said the study entitled "Capital Investments by the World Petroleum Industry." $38 billion was spent for facilities in other areas.

Crude oil production, refinery throughput and petroleum consumption in the free world increased nearly two-fold between 1950 and 1960, the report said, and gross investment in fixed assets expanded 2.8 times during that period.

As a result of the funds spent during this decade, the gross investment in fixed assets used by the industry increased from $37 billion at the end of 1950 to $105 billion at the end of 1960. Of this amount, $57.8 billion was invested in this country and the balance of $46.8 billion in other areas.

American companies contributed $17 billion of the total investment of $46.8 billion in facilities located overseas, according to the survey. Their participation was 59 per cent of the investments in Canada, 64 per cent in Venezuela, 23 per cent in Western Europe, 49 per cent in the Middle East and 27 per cent in other countries.

New Lunkenheimer Circular Describes Top-Entry Ball Valves

New Lunkenheimer Bronze and Stainless Steel Top-Entry Ball valves for pressure or vacuum applications in liquids, gases and slurries are described in a new circular, No. 612 MF, prepared by The Lunkenheimer Co., Cincinnati, Ohio. Information includes dimensions of six valve sizes, pressure ratings, and design features and advantages. Operation of the valves, Type 316 Stainless Steel for corrosive service and Bronze for general, is detailed in cutaway views.

Copies of Circular 612 MF may be obtained by writing to The Lunkenheimer Co., Cincinnati 14, Ohio.

Summary of District V Oil Industry Conditions (and October Preliminary) 1961

BY OIL PRODUCERS AGENCY OF CALIFORNIA

Highlights

The long-term down trend in District V production appears to have been arrested, even though the reason is increasing Alaskan, rather than California, production.

For the first nine months of the year, District production averaged 839,000 B/D, up 7,000 B/D from the 1960 nine-month average of 832,000 B/D.

Total Supply, Demand, and Stocks

Weekly figures for October indicate that total supply was 1,463,000 B/D, demand was 1,466,000 B/D. and stock decreased 3,000 B/D. This decrease, 93,000 barrels for the month, would bring stocks to 118,404,000 barrels on October 31, compared with 118,231,000 on October 31, 1960. The year's increase was 173,000 barrels.

Crude Production, Imports, and Stocks

Weekly figures for October indicate that crude production was 839,000 B/D, imports were 361,000 B/D and that there was no change in stocks. At 30,173,000 barrels on October 31, crude stocks would be 1,446,000 barrels under the 31,619,000 barrels of October 31, 1960.

Gasoline Supply, Demand and Stocks

Preliminary figures for October indicate that gasoline supply was 596,000 B/D, demand was 600,000 B/D, and stocks decreased 4,000 B/D. This decrease, 124,000 barrels for the month, would bring total stocks to 28,191,000 barrels on October 31, compared with 30,093,000 on October 31, 1960. The year's decrease was 1,902,000 barrels.

Distillate Fuel Supply, Demand, and Stocks

Weekly figures for October indicate that distillate supply was 215,000 B/D, demand was 247,000 B/D, and stocks dropped 32,000 B/D. This decrease, 992,000 B/D for the month, would bring stocks to 16,553,000 barrels on October 31, compared with 15,954,000 on October 31, 1960. The year's increase was 599,000 barrels.

Residual Fuel Supply, Demand, and Stocks

Weekly figures for October indicate that residual supply was 279,000 B/D, demand was 296,000 B/D, and stocks dropped 17,000 B/D. This decrease, 527,000 barrels for the month, would bring stocks to 17,598,000 barrels on October 31, compared with 16,245,000 on October 31, 1960. The year's increase was 1,353,000 barrels,

---

Tidewater to Build Natural Gas Processing Plant in Texas

Tidewater Oil Company plans to construct a 32-million-cubic-feet-per-day natural gas processing plant at Normanna, Bee County, Texas.

Hudson Engineering Corporation of Houston will build the facilty, with actual on-site work commencing about March, and completion scheduled for May, 1962.

Plant capacity at full stream operation is 63,000 gallons per day of ethane/propane mix; 15,000 gallons per day of butane, and 8,500 gallons per day of natural gasoline.

The degree of automation in the plant will permit unattended operation, if desired, although Tidewater plans to operate the unit as a manned installation.

Some 26 producing wells in the Normanna Field are involved, several of which are dully completed.

Tidewater, with a 30 per cent interest, will be the operator. Other participants include the Dougherty Interests, 40 per cent; Tenneco Oil Company, 8 per cent; Lone Star Producing Company, 4 per cent; Edwin M. Jones Company, 4 per cent, and others, 14 per cent.

The plant site is northeast of Normanna, in the northeast corner of the S. R. Bridge 320-acre tract, and includes approximately 10 acres.

The dry residue gas will be sold to Houston Natural Gas Corporation, United Gas Pipe Line Company, and Natural Gas Pipe Line Company of America.

One of the more interesting features of the fully automated, low temperature absorption-type plant will be its aqueous ammonia refrigerating system.

The process eliminates the need for gas compressors normally required for conventional ammonia or propane refrigerant systems.

In operation, ammonia at minus 15 degrees F, is in a vapor state in chillers which cool the gas coming into the plant.

Ammonia coming off the chillers is absorbed in water. The ammonia-water solution is pumped by a conventional centrifugal pump through a system of exchangers where it is preheated and sent to an ammonia still.

In the still, the ammonia vapors are driven off overhead, condensed to a liquid in a water-cooled ammonia condenser, then returned to the gas chillers.

COMPRESSORS

FOR LEASE OR SALE

"Packaged Units" or "Bare" Units in Stock For:

- **GAS BOOSTER**
- **GAS LIFTING**
- **VACUUM**
- **AIR DRILLING**
- **INSITU SERVICE**

New and Used

BENZ ENGINEERING INC.
1539 Olympic Blvd.
Montebello, Calif.

Phone
RAymond 3-8441
RAymond 3-8442
PArkway 1-3611

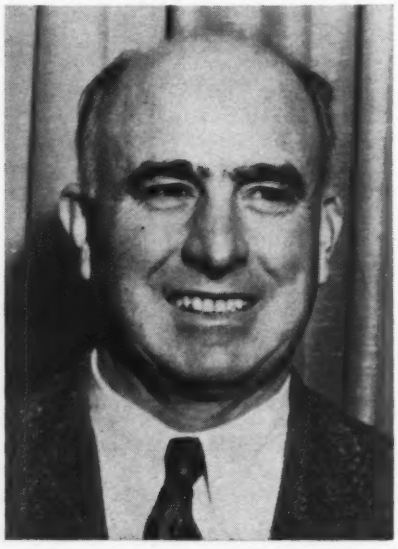
Personalities IN THE NEWS

B. C. Shaul Heads Tidewater's Western Division Manufacturing

The appointment of **B. C. Shaul** as Tidewater Oil Company's Western Division manufacturing manager was announced recently by **James McDonald,** Tidewater vice president and Western Division general manager.

Shaul succeeds **Oscar Larson** who retired November 30, after 38 years of service with the "Flying A" company.

Shaul, who joined Tidewater in 1929 as an engineer at the Avon refinery, was assistant division manufacturing manager for eleven months prior to assuming his new position. Other major positions he has held at Avon include general superintendent (1959-1961), superintendent of engineering, maintenance and construction (1954-1959), and process superintendent (1948-1954).



B. C. Shaul

A native of Lakeport, Calif., Shaul received his B.S. degree in electrical engineering from the University of California in 1929.

He is a director of the Concord Hospital District, a director of the Contra Costa County Development Association, and a member of the Martinez Rotary Club.

Ian Campbell New President of Mineralogical Society of America

Ian Campbell, state geologist and chief of the Division of Mines and Geology, has been elected president of the Mineralogical Society of America. He was chosen at the annual meeting of that society in Cincinnati in October of this year. He succeeds **Dr. E. F. Osborn,** vice president of Pennsylvania State University.

Dr. Campbell, who has been chief of the Division of Mines and Geology since 1959, resides in San Francisco, where the Division maintains its headquarters office.

Francis J. Turner, professor of geology at the University of California at Berkeley, was elected to a three-year term as councilor of the society.

Frank Gass Heads New Dresser/SIE Process Control Group

R. O. Vaughan, Dresser Electronics, SIE Division, marketing vice-president announced recently formation of a new engineering application and marketing group to handle the firm's "growing line of process control equipment." **Frank Gass** has been appointed manager for the group.

Gass has previously served as engineering writer and, prior to his appointment, contract administrator for Dresser/SIE. He has over 17 years of experience in airline and petroleum electronics. He will remain officed at the Dresser Houston Electronics Center. Equipment handled by his group is used in chemical, petro-chemical and refining industries.

Continental-Emsco Appoints New Advertising Supervisor

Jack Bache, Jr., is the newly appointed advertising supervisor for Continental-Emsco Company, the oil field manufacturing and supply division of The Youngstown Sheet and Tube Company, according to an announcement by **T. H. Fraser,** manager of sales promotion, advertising and public relations for the Dallas-based company.

Jack Bache, Jr.

As advertising supervisor, Bache will supervise and coordinate all company advertising and public relations programs. He will work with Continental's advertising agency on the production and placement of advertising for all media, as well as selection of media, market research and public relations programs.

Bache, a graduate of the University of Oklahoma, joined Continental-Emsco in March of 1960 as an advertising assistant. He is a member of the Association of Industrial Advertisers and the Dallas Junior Chamber of Commerce.

FROM oilmaster

An Insert Pump Anchor That:

1. *Sets, Packs-off and Releases Without Rotation!*
2. *Eliminates Risk of Unscrewing Rods!*
3. *Permits Raising, Lowering or Re-Setting Pump Without Pulling Tubing!*

New! Advanced type of collet design maintains pack-off without wicker devices, It's simple, positive, trouble-free!

Here's a combination pump anchor and pack-off that is the ideal solution for wells where a shoe or seating nipple has not been provided for the pump. It's the Oilmaster Insert Pump Anchor—a *vertical setting* pump anchor that requires no rod rotation (either forward or backward) to set, release, pack-off or re-position the anchor in the well.

- **There's no risk of unscrewing the rod string while installing or releasing the Oilmaster Anchor.**
- **The Oilmaster Anchor can readily be set in crooked or directionally-drilled wells.**
- **No clutch arrangement is required on the pump.**
- **The Oilmaster's compression pack-off provides a positive seal, even in worn, pitted or "ring-wormed" tubing.**
- **The Oilmaster Anchor can be set, released and re-set without damaging the packing element. No shear pins are used!**
- **The Oilmaster Anchor provides a positive hold-down, even should the well flow through the pump.**

Complete Control with Unique VERTICAL Action!

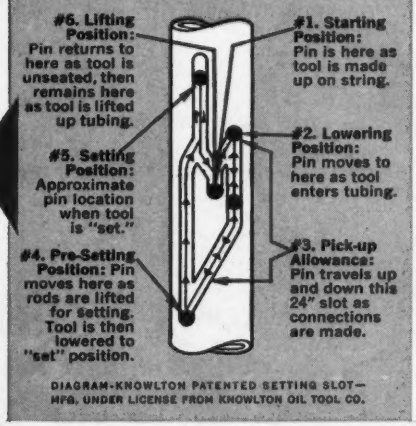

#6. Lifting Position: Pin returns to here as tool is unseated, then remains here as tool is lifted up tubing.
#5. Setting Position: Approximate pin location when tool is "set."
#4. Pre-Setting Position: Pin moves here as rods are lifted for setting. Tool is then lowered to "set" position.
#1. Starting Position: Pin is here as tool is made up on string.
#2. Lowering Position: Pin moves to here as tool enters tubing.
#3. Pick-up Allowance: Pin travels up and down this 24" slot as connections are made.

DIAGRAM-KNOWLTON PATENTED SETTING SLOT—MFG. UNDER LICENSE FROM KNOWLTON OIL TOOL CO.

COMPARE the above advantages against the pump anchors you are now using. Why jeopardize your wells with anything *less* than the Oilmaster Insert Pump Anchor?

Want More Facts?

Ask for Bulletin 6104 which gives details, cutaway views and operating data. No obligation of course! Write FLUID PACKED PUMP, Armco Steel Corporation, Los Nietos, California.

DISTRIBUTED BY: Beacon Supply Company • Dominion Oilfields Supply Company, Limited • Industrial Supply Company • National Supply Division, Armco Steel Corporation • Union Supply Company

ARMCO Fluid Packed Pump

Field Development

LOS ANGELES BASIN

Salt Lake Completion

Jade-Buttram completed Gilmore No. 5 pumping 145 b/d of 18.6 gravity oil cutting 1.4 per cent from the interval 2353-2445 feet. Located on the northwest quarter of Section 21-1s-14w, the well was first abandoned at a total depth of 7820 feet and is now redrilled to 2900 feet. 7" casing is cemented at 2353 feet. Metropolitan No. 4 reached a total depth of 3888 feet and is being completed. 7" casing is cemented at 2930 feet.

Locations have been staked for two more wells in the field. Metropolitan No. 5 and Gilmore No. 8 are both located south and west from the intersection of Stanley Avenue and First Street.

Whittier Outpost

Standard Oil Company has staked a location for Savage No. 17 to be drilled on the southeast quarter of Section 22-2s-11w. The well is a westerly outpost to the Whittier Field.

Humble Wildcat

Humble Oil & Refining Co. is grading rig site for Trustee No. 1 located in the southern part of Orange County in the San Juan Capistrano area. Located on Section 20-7s-7w, the test will be drilled to about 6800 feet.

Oak Canyon Test

Joel Brandon is drilling below 600 feet on Mark VII No. 2 located on the northwest quarter of Section 33-5n-17w in Los Angeles County. The wildcat is about one mile east of the Oak Canyon Field.

Newport Test To Deepen

The Higdon Company of Long Beach is planning to redrill and deepen Wynn No. 1 located on the northwest quarter of Section 13-6s-11w in Orange County. The well is in the West Newport area and will be deepened from its present depth of 3450 feet to approximately 6000 feet.

Las Cienegas

Union Oil Co. of Calif. is drilling below 5000 feet on Union-Signal-Murphy No. 4 located near the intersection of Adams Boulevard and Gramercy Place on Section 2-2s-14w. This is the company's fourth test in the area but the information of the three other wells, with the exception of depth, has not been released. Well No. 1 was drilled to a total depth of 8223 feet and plugged back to 4070 feet. Well No. 2 was drilled to 5366 feet and Well No. 3 to 5775 feet.

Corona Test Re-abandoned

A. L. Hunter, Operator, redrilled and deepened V.O.W.M. No. 1 from its old depth of 3505 feet to a total depth of 4157 feet and re-abandoned the test. The well was located on the southeast quarter of Section 33-3s-7w in Riverside County.

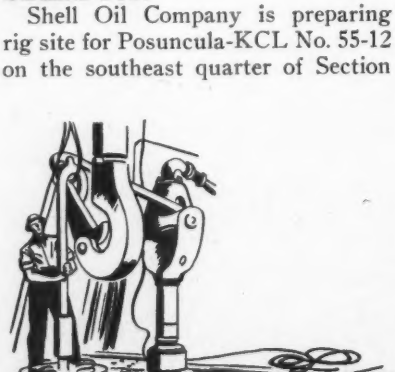
SAN JOAQUIN VALLEY

Gosford Wildcat Apparent Discovery

Wagenseller - August - Mobil - Signal logged 30 feet of Upper Stevens oil sand and is running 5½" casing to test KCL No. 12-16. Top of the sand was logged at 6360 feet. Located on the northwest quarter of Section 16-30s-27e about 2½ miles east of the Gosford Field, the well was drilled to a total depth of 7050 feet.

Strand Test

Shell Oil Company is preparing rig site for Posuncula-KCL No. 55-12 on the southeast quarter of Section 12-30s-25e. The test will be drilled to about 10,000 feet.



Macrate Wildcat

Macrate Oil Company has staked a location for Noble No. 32 on the northwest quarter of Section 5-15s-17e in Fresno County. Closest production is at the Raisin City Field, 1¼ miles to the southeast.

Standard Tejon Hills Test

Standard Oil Co. has staked a location for Tejon Ranch No. 7 on the southwest quarter of Section 15-11n-19w.

Richfield Outpost Test

Richfield Oil Corp. is preparing to drill ROC-KCL-G No. 78-27 located on the southeast quarter of Section 27-11n-20w. The test is located between the Windgap and Main production of the Wheeler Ridge area. ¼ mile to the south Richfield drilled KCL-L No. 72-34 to a total depth of 8354 feet and a redrilled depth of 6831 feet. Details of a test on the interval 6741-6829 feet were not released.

Semitropic

Arrowhead Exploration Co. is drilling below 1200 feet on Monterey No. 3 located on the northwest quarter of Section 25-27s-23e. It will be a 4600-foot test. The well is a northwest offset to Fee No. 32 completed by the Fullerton Oil Co. in 1935 flowing 34,000 mcf of gas from the interval 2327-2441 feet and abandoned in 1949.

Mount Poso Wildcat

N.E.C.K. Petroleum Co. has staked a location for Mohawk-UCL No. 1-34 on the northeast quarter of Section 34-26s-28e. The test is east of the Dominion area of the Mount Poso Field.

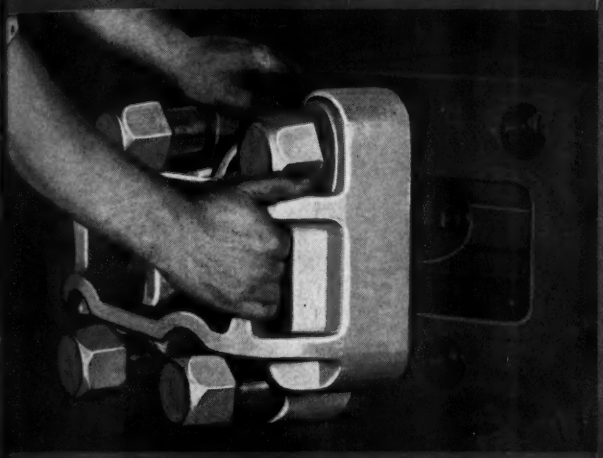
Six Occidental Wells

Occidental Petroleum Corp. has staked locations for six wells on the Amber lease in the Midway-Sunset Field. Numbers 70 to 75 are all located on the northwest quarter of Section 26-31s-22e.

WHEN YOU BUY BLOWOUT PREVENTERS

GET SHAFFER "SWING OPEN" DOOR DESIGN... IT SIMPLIFIES RAM CHANGES!

WHAT IT IS: With Shaffer Blowout Preventers each ram is readily accessible by simply unbolting and swinging open a convenient door... a *side*-opening door in the Shaffer Type B and Type E Blowout Preventers—an *end*-opening door in the Shaffer Type XHP and Type LWS Blowout Preventers. Only Shaffer equipment offers this important design advancement!



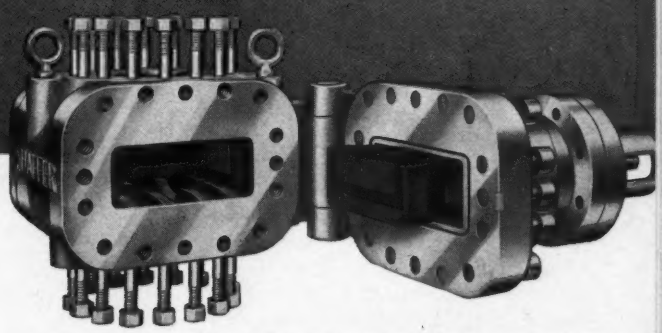
SHAFFER TYPE B AND TYPE E PREVENTERS FEATURE SIDE-OPENING DOORS FOR RAM CHANGES

WHY IT'S BETTER: As a drilling program progresses, it is necessary to change blowout preventer rams whenever the size of the drill pipe is changed. This sounds like a relatively quick and simple operation. And it *is* with Shaffer Blowout Preventers because of their "Swing-Open" door design. But this is not true of *all* blowout preventers...

In blowout preventers that do not have quick-access doors, changing the rams—or checking the ram compartments—can be a complicated, time-consuming operation. In many cases, a major portion of the control gate assembly must be dismantled in order to gain access to the ram compartments—particularly those in the lower unit of a two unit hook-up.

Also with other units, hydraulic lines often must be disconnected, resulting in loss of hydraulic fluid and further complications in the over-all operation—plus the ever-present risk of not properly reconnecting the lines.

But not with Shaffer Blowout Preventers!



SHAFFER TYPE XHP AND TYPE LWS PREVENTERS FEATURE END-OPENING DOORS FOR RAM CHANGES

THE "SWING-OPEN" DOORS IN SHAFFER UNITS

...assure quick, easy access to the ram compartments whenever desired. Moreover, with Shaffer design it is not necessary to break hydraulic lines to open the gates... no fluid is lost... and there's no risk of inadvertently leaving a line "open" (or not properly re-connecting the fittings).

Simply unbolt and swing open the doors. Change rams. Close and bolt the doors shut again. It's that simple!

And the safety and convenience of "Swing-Open" door design is just one of the many "plus" advantages built into *every* Shaffer Blowout Preventer!*

THERE'S A SHAFFER BLOWOUT PREVENTER FOR YOUR PARTICULAR REQUIREMENT!

TYPE B AND TYPE E PREVENTERS are the units selected for most drilling applications. Type B has *non-rising* Locking Shafts for maximum compactness... Type E has *rising* Locking Shafts for quick indication of ram position.

TYPE XHP PREVENTERS are ideal where extra-high well pressures are a problem. Each XHP unit is individually tested to 15,000 PSI Working Pressure in 7 1/16" Bore Size... to 10,000 PSI Working Pressure in 9" and 11" Bore Sizes.

TYPE LWS PREVENTERS combine lightweight with adequate pressure rating for a wide range of applications. LWS units weigh approximately *half* as much as other Preventers of comparable size!

The above Preventers (except Type XHP) are available in choice of Double units (*two* Preventers unitized into *one* compact body for maximum space-saving)—or Single units.

See your nearest Shaffer representative for complete details. Or write direct!

***OTHER SALIENT SHAFFER ADVANTAGES...**

- **Positive "In-Line" Power Drive!**
- **Space-Saving Compactness!**
- **Self-Cleaning Ram Compartments!**
- **Completely Enclosed Construction!**
- **"Floating" Ram Design!**

... and still others your Shaffer representative will gladly explain to you!

38 years OF OIL TOOL LEADERSHIP

SHAFFER

HIGH PRESSURE DRILLING AND CONTROL EQUIPMENT • FISHING TOOLS THAT EXCEL

CALIFORNIA SERVICE SHOPS: Santa Fe Springs, Santa Maria, Ventura, Avenal, Bakersfield and Taft
HOUSTON, TEXAS, 6006 Navigation Blvd. • ODESSA, TEXAS, 1925 West Second Street
OKLAHOMA CITY, OKLAHOMA, Shaffer Tool Works, 6201 South Shields Boulevard
FARMINGTON, NEW MEXICO, Shaffer Tool Works, Post Office Box 546
CASPER, WYOMING, Shaffer Tool Works, Post Office Box 1788
HOUMA, LOUISIANA, Shaffer Tool Works, Post Office Box 827
EXPORT SALES OFFICE, Shaffer Tool Works, 500 Fifth Avenue, New York, N.Y., U.S.A.
IN CANADA: Shaffer Western Hemisphere, Inc., 5823 103A Street, Edmonton, Alberta.

NORTHERN CALIFORNIA

Occidental Gas Discovery

Occidental Petroleum Corp. completed Keller Estate No. 1 as a new field discovery flowing 1030 mcf of gas per day through a ½" bean with 290 psi tubing pressure and 350 psi casing pressure. The well is producing from the perforations 1758-1735 and 1645-1640 feet. The discovery was drilled on a 1724-acre block three miles southeast of the Willow Pass Field to a total depth of 4965 feet, and after cementing 8⅝" casing at 2975 feet drilled out to 2893 feet. The discovery is located on the northeast quarter of Section 35-2n-1w in Contra Costa County and has been designated as the Mulligan Hills Field.

Sutter County Completion

Occidental Petroleum Corp. completed Standard-Kylling Unit A No. 1 flowing 5200 mcf of gas through a ⅜" bean from the perforated intervals 5796-5786 and 5656-5598 feet. Flow pressures were 1200 over 1600 psi and shut in pressures 2800 over 2800 psi. An extension well of the West Butte Gas Field located on the northwest quarter of Section 17-16n-1e, the completion was drilled to a total depth of 6925 feet and cemented 5½" casing at 5897 feet.

Kern County Land Wildcat

Kern County Land Company is completing plans to drill a San Joaquin gas test five miles southwest of Occidental Petroleum Corporation's Lathrop area discovery. KCY-Great Basins-Stark Unit No. 1 will be located near the center of Section 26-1s-5e. The test is scheduled to be drilled to about 6500 feet.

McCulloch Outpost

McCulloch Oil Corp. of Calif. is preparing to spud Ginochio No. 3, an 8000 foot test in the Los Medanos area of Contra Costa County. Located on the southeast quarter of Section 7-2n-1w, the test is about ¼ mile northeast from the company's Ginochio No. 1, a shallow producer.

Kirk Gas Completion

Shell Oil Co. completed Cameron-Schohr No. 1-16 flowing 4700 mcf of gas per day through a 5/16" tubing bean and 5500 mcf per day through a 5/16" casing bean. A total of 134 feet are open to production within the interval 8024-8705 feet. Located on the northwest quarter of Section 16-13n-1e in Colusa County, the well was drilled to a total depth of 8775 feet and cemented 5½" casing at 8775 feet. Shell's Cameron-Schohr No. 3-16 located in the center of the southwest quarter of Section 16, approximately ½ mile south, is drilling below 5000 feet.

Macrate Wildcat

Macrate Oil Co., Operator for Proberta Associates, is building roads and rig site for Zocher No. 1 to be drilled on the northwest quarter of Section 26-26n-3w in Tehama County. The test is about two miles northwest of the town of Gerber.

Walnut Grove Test

Standard Oil Co. has staked location for Blossom Community No. 3 on Lot 39 of the Price Metal Farms Tract in Section 31-5n-5e in San Joaquin County. The test is an outpost to the Walnut Grove Gas Field.

Brazos Gas Test

Brazos Oil & Gas Co. is preparing to spud Brazos-Union-Lock Unit One No. 3 located on the northeast quarter of Section 26-5n-4e in Sacramento County. This is a northerly outpost to present production at the Walnut Grove Gas Field.

E. C. Brown Test

E. C. Brown, Operator, is preparing rig site for H. D. Towne Unit No. 6 to be drilled on the southeast quarter of Section 31-5n-5e in San Joaquin County.

Franco Western Wildcat

Franco Western Oil Co. is moving in rotary to drill Turner No. 1 located on the northeast quarter of Section 16-1s-4e in San Joaquin County. Closest production is at the Roberts Island Gas Field nine miles to the northeast.

Walnut Grove Outpost

Henry Hottinger and Anthony J. Kennedy of Sacramento have staked a location for Vollman No. 1 on the northwest quarter of Section 35-5n-4e in Sacramento County.

Amerada Outpost Test

Amerada Petroleum Corp. is drilling below 6100 feet on Norton No. 1 located on the northeast quarter of Section 29-6n-2e in Solano County. The well is an easterly test of the Bunker Gas Field.

COASTAL AREA

Two Cat Canyon Tests

Continental Oil Co. and Standard Oil Co. are each grading locations for development wells. Standard will drill Los Flores 3 No. 76-22 on the southeast quarter of Section 22-9n-33w. Continental's location for Porter No. 18 is on the northeast quarter of Section 23-9n-33w.

Storm Sinks Drilling Barge

Texaco Inc. was forced to suspend operations temporarily on Jade No. 6 due to the sinking of the drilling barge in 80 feet of water during a recent storm. The test is located offshore from Conception on projected

Section 13-4n-34w in Santa Barbara County.

Sun Wildcat

The Sun Drilling Corp. has staked location for Sun-Schmidt No. 1, a Ventura County wildcat about six miles south of the town of Lebec. The test will be drilled on the southwest quarter of Section 26-8n-19w in Hungry Valley.

Bardsdale Test Redrilling

Thornbury, Geis and Hunter drilled to 7488 feet on King No. 10 and after an unsatisfactory test of the interval 4810-5080 feet plugged back to 4250 feet and is redrilling below 4500 feet. The well is located on the southeast quarter of Section 1-3n-20w.

Union Wildcat Abandoned

Union Oil Co. drilled to a total depth of 8006 feet and a redrilled depth of 7665 feet on Ex-Mission No. X-12 and abandoned the well without testing. The wildcat was located on the southwest quarter of Section 21-4n-21w.

Fillmore Test Abandoned

Standard Oil Co. abandoned its Fillmore deep test at a total depth of 14,505 feet. Goodenough No. 1 was located on the southwest quarter of Section 7-4n-19w two miles north of the Fillmore Field.

Sespe Area Test

Getty Oil Company has staked location for Connell No. 1, a development well located on the northwest quarter of Section 6-4n-19w in Ventura County.

OTHER AREAS

Alaska

British-American Oil Producing Co. is preparing to survey in a location for a wildcat test in Township 15n Range 7w (SBM) in the Susitna Flata area about twenty-five miles northwest of the town of Anchorage. Tidewater Oil Company and Pan American Petroleum Co. have an interest in the well.

Union Oil Co. of Calif. and The Ohio Oil Co. will drill a wildcat test on a 79,000-acre block south and west of the City of Fairbanks. The test will be drilled in the Tanana area in Township 4s Range 8w (FBM).

Montana

Humble Oil & Refining Co. is grading roads and rig site for Ault No. 1 to be drilled on the northwest quarter of Section 35-28n-49e in Roosevelt County. Location for the wildcat falls 18 miles southeast of Devonian production at the Tule Creek field and will test the Nisku at about 7500 feet.

Whitehall Oil Co. has announced a location for a 10,200-foot Red River test in Dawson County. The wildcat is east of the Glendive Field and is located in the northwest quarter of Section 25-15n-55e on the Cedar Creek Anticline.

Texaco Inc. completed NP-G No. 1 as a new field discovery in Dawson County pumping 275 b/d of 42 gravity oil with a cut of 4 per cent from the Interlaken perforations 9137-9146 feet and 25 b/d of 39 gravity oil cutting 20 per cent from the Red River perforations 9718-9733 feet. Located on the southwest quarter of Section 17-16n-54e two miles south of the Woodrow Field, the discovery was drilled to a total depth of 9835 feet and has 7" casing cemented at 9800 feet. A southwest test will be drilled by Texaco at NP-G No. 2 located on the northwest quarter of Section 17-16n-54e.

Phillips Petroleum Co. has staked location for War Cloud No. 1 on the northeast quarter of Section 5-29n-49e in Roosevelt County. The wildcat is in the Tule Creek area and is scheduled to be a Duperow test at about 8000 feet.

New Mexico

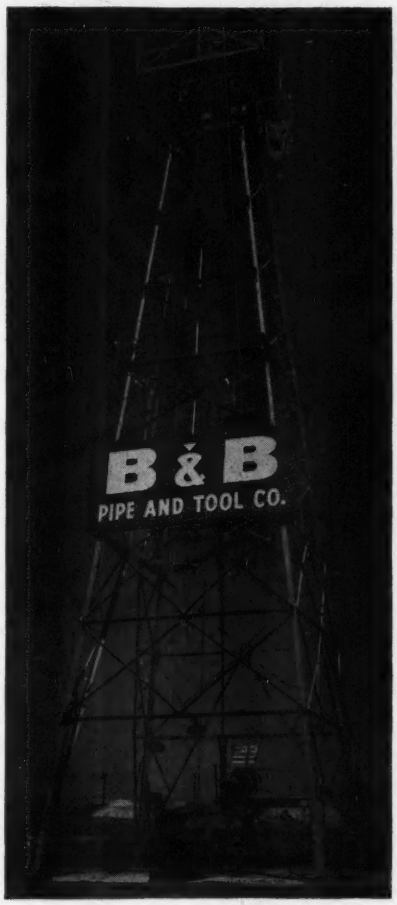
El Paso Natural Gas Company completed Gartner No. 9 flowing 2800 mcf of gas per day through a 48/64" bean with a flow pressure of 220 psi and a shut-in pressure of 2200 psi. The well is producing from the Dakota perforated at six intervals within 7314-7537 feet and is about six miles northwest of the nearest Dakota production. Located on the northeast quarter of Section 33-30n-8w in San Juan County, the completion was drilled to a total depth of 7640 feet and cemented 4½" casing at 7640 feet.

Lemm and Maiatico have staked a location for Danglade-Government No. 1 on the southwest quarter of Section 29-24n-1e in Rio Arriba County. The well is in the easterly portion of the San Juan Basin and will test the Green Horn at about 4000 feet.

Utah

Pure Oil Company continues to test Big Flat Unit No. 4, an apparent Grand County discovery. On a 45-

THE INDUSTRY'S MOST COMPLETE SERVICES FOR OIL COUNTRY TUBULAR GOODS



- Pipe Threading, Testing, Straightening, Cleaning, Inspection
- API Couplings
- Custom Built Oil Well Liners
- Vertical Mill Cut Slotting
- Gravel Prepacked Liners
- Security Flush Joint Threads

B&B PIPE AND TOOL CO.
3035 Walnut Avenue,
Long Beach 7, California

Phones: GArfield 4-0704
NEvada 6-1715

hour drill stem test recovery was 1170 barrels of oil from the Paradox Salt. Top of the Salt was logged at about 4240 feet. The wildcat is located on the southeast quarter of Section 27-25s-19e and has been drilled to 7233 feet. The test falls 3½ miles northwest of Mississippian production at the Big Flat Field. Several dry holes have been drilled between the well and the Big Flat Field.

Southern Natural Gas Co. has staked a location for USA No. 1 on the northwest quarter of Section 6-27s-20e in San Juan County. The wildcat will test the Devonian at about 6800 feet and is about four miles south of the Big Flat Field.

Skelly Oil Co. is ready to commence drilling on Emery Unit No. 1 located on the southeast quarter of Section 34-22s-5e in Sevier County. It will be a Mississippian test at 11,000 feet. Among the operators having an interest in the 25,895-acre block are the Mohawk Petroleum Co. and Wilshire Oil Co.

Washington

Edward J. Carr of Ventura, California, is drilling below 1000 feet on Silver Community No. 1 located on the southwest quarter of Section 31-20n-6e in Pierce County. The test is 16 miles southeast of the City of Tacoma and will be drilled to 7500 feet. W. S. McBurnie is the engineer.

Wyoming

MKM Oil Co. completed Robinson No. 1 as a Minnelusa discovery pumping 420 b/d oil with a cut of 1 per cent from the perforated interval 6200-6196 and 6188-6178 feet. Total depth is 6367 feet with 5½" casing cemented at 6358 feet. Top of the Minnelusa was logged at 6162 feet. Location of the well is on the northwest quarter of Section 4-49n-67w in Crooks County.

Pan American Petroleum Co. has received approval from the U.S.G.S. and has staked a location on the Moneta Hills Unit in Fremont County. There are 20,197 acres in the Unit. Moneta Hills Unit No. 1 will be drilled on the southeast quarter of Section 31-38n-90w and will test the Lance at 11,000 feet.

Sinclair Oil and Gas Company is preparing to drill a Weston County wildcat test located about twelve miles south of the Minnelusa production at the Raven Creek Field. Location for Federal-Frontier No. 1 is on the northwest quarter of Section 19-46n-68w. The well will test the Minnelusa at about 9400 feet.

Davis Oil Co. has taked locations for three wildcat tests in Campbell County. All are Minnelusa tests. Three miles northeast of the O'Connor Field, Harris Estate No. 1 will be drilled on the northwest quarter of Section 15-52n-69w. Government-Marcelino No. 1 is located on the northeast quarter of Section 15-53n-69w and Federal-Brown No. 1 is located on the northwest quarter of Section 33-53n-69w, four miles east of the Pownall Ranch.

A COMPLETE TRAVEL SERVICE WITH SPECIAL ATTENTION TO OIL PEOPLE!

- AIRLINES
- STEAMSHIPS
- RAILROADS
- AIR CHARTER SERVICE
- CAR RENTALS
- HOTELS

Passport Assistance, also complete Tourist Card and Visa Service

For Domestic & International Travel, or Tours arranged to any part of the world, call: —

TOM ASHE

Eberly Travel Service

1930 Wilshire Blvd.

Los Angeles 57, Calif.

HU 3-7101 **HU 3-6414**

(24 hour answering sevice)

NOW AVAILABLE!

1962 Edition of Foust's Sales and Service Directory

The current edition of this well-known pocket-sized leather bound Californa Oil Field Directory is the most accurate field reference book published in California. The volume carries all oil operators, Sales and Service firms, drilling contractors, important agencies, and consultants, together with complete company identification, addresses, phone numbers and administrative and operative personnel. With this book in your possession, you need never fumble for quick information concerning California oil field operations.

ORDER YOUR COPIES NOW

Complete Copies at $6.50 (plus 4% tax)
Fillers at $5.50 (plus 4% tax)

FOUST'S SALES & SERVICE DIRECTORY
641 E. Wardlow Road - Long Beach 7, California
GArfield 4-4398

Ben C. Dunn Retires As Pres., Benz Engineering

Ben C. Dunn has announced his retirement as president of Benz Engineering, effective December 31, 1961.

Ben started in the oil industry in 1915, with Associated Supply Co., a division of Associated Oil Co. He was assigned to the Coalinga and Taft area and took an active part in the supply operations for the field development of those areas.

He joined the Fairbanks-Morse organization, as salesman for a few years in its pump and engine section, then transferred back to Associated in the Bakersfield and McKittrick area. In 1924 Ben joined the Bessemer Gas Engine Co., became the Pacific Coast Manager, and when Cooper bought out Bessemer he was retained in engine sales.

In 1939 Ben joined the staff of Allied Supply Co. in its National Transit Pump section and in 1942 he formed Benz Engineering and operated it along with his regular job at Allied Supply until 1946, repairing pumps and compressor cylinders and installing rebuilt engines.

In 1946 Benz Engineering moved to its present location in Montebello where they have been actively engaged in Pump and Compressor Parts manufacturing, repairing, sales and unitizing of compressors. They have designed the machinery for many of the fireflood projects in California, built compressor plants and enlarged others, leased compressors for various testing and pilot plants and rebuilt Angle gas engines for expansion or modification of field installations.

Ben has enjoyed all forty six years in his association with all the fine people in the oil and gas industry. He plans to live on his ranch at Livingston, California and keep the Pheasant and Ducks from becoming over-populated as well as fishing in the Sierras.

Bob Smith, who has been with Benz Engineering Co. for fifteen years, is the present owner and will continue the same pattern of operations.

U.C.L.A. To Hold Course On Gas

"Fundamental Principles of Gas Chromatography," an intensive three day course sponsored by University of California Engineering and Physical Sciences Extensions and the UCLA Department of Chemistry will be given January 31 through February 2, 1961 on the UCLA campus.

Further information concerning the class may be obtained from Department K, University of California Extension, Los Angeles 24.

Magna Products Inc., Acquires Division of Sievers, Inc.

A. V. Louk, general manager of the chemicals division of Magna Products, Inc. announces the acquisition of the Oil Well Stimulation Products Division of Sievers, Inc., effective November 8, 1961.

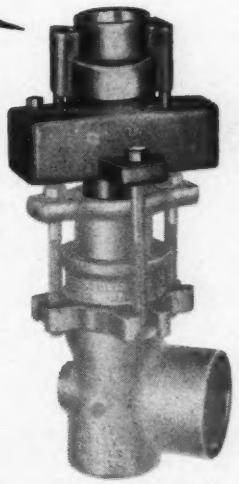
William E. Sievers is to serve on the staff of Magna Products, Inc. as a consultant on stimulation and completion practices. Mr. Sievers is the author of patents in the fields of stimulation and completion.

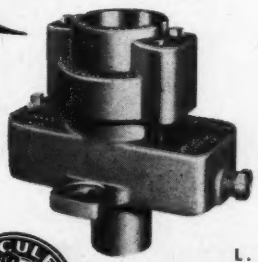
The manufacturing facilities of Sievers, Inc. are to be moved from their present Long Beach location to Magna Products' Santa Fe Springs address in the near future.

YOU CAN ELIMINATE BURNED PACKING FOR LESS THAN $20.00

HERCULES OIL RESERVOIR UPPER GLAND

Fits all Hercules Stuffing Boxes and costs only $18.75 to $19.75, complete.





The Hercules Oil Reservoir Upper Gland fits all Hercules Duplex Stuffing Boxes and was designed primarily for use on "problem" wells which pump-off and burn the stuffing box packing. The reservoir capacity is 1 fluid quart. The polished rod moves through the oil in the reservoir which lubricates and cools it. The oil film on the polished rod is controlled on the "up stroke" by the Split Cone Packing Ring (located between the Oil Reservoir Gland Body and the Cap). Excess oil and the dust or sand which invariably collect on the polished rod are wiped off by the Split Cone Packing Ring on the "down stroke." This excess oil and dirt are channeled back into the reservoir by means of the specially-designed Cap. The dirt will settle in the reservoir and can be removed through the drain plug.

Representative:
L. T. WALTIMIRE
P.O. Box 1612 — 1104 Dobrusky Drive
Bakersfield, Calif. • FAirview 4-4169

HERCULES TOOL COMPANY
MANUFACTURERS OF OILFIELD EQUIPMENT
GENERAL OFFICES AND PLANT • TULSA, OKLAHOMA
Export Representative: Oil Field Equipment Co., Inc. 90 West Street, New York, N. Y.

LAUGH

A retired army officer met his former orderly on the street one day, and hired him to do the same duties which he had performed for him in the army. The retired officer told his former orderly that he could start his day by waking him at seven o'clock in the morning as he used to do.

The next morning, punctually at seven, the ex-orderly strode into his boss's bedroom, shook him into wakefulness, then leaned over and spanked the ex-officer's wife on the lower extremities, saying, "All right, baby, it's back to town for you."

A doctor in Tennessee was called to examine a young wife of an elderly, deaf mountaineer. Your wife is pregnant," he told the husband.

The mountaineer, hand behind his ear, queried, "Eh?"

The doctor shouted, "I said your wife is pregnant."

"Eh?"

Irritated, the doctor screamed, "Your wife is going to have a baby!"

The man walked to the front of the porch, spat out a mouthful of tobacco juice, and drawled, "I ain't a bit surprised. She's had every opportunity."

The old man was more than a little irritated when he called his boys in and demanded to know who pushed the privvy into the river.

"I did, father," spoke up one lad.

"Come out in the woodshed," the old man ordered. "I'm going to whale the tar out of you."

"George Washington's father didn't punish him when he told the truth," pleaded the boy.

"Yes, I know," replied the old man, "but" George Washington's father wasn't sitting in the cherry tree!"

Census Taker—"Do you live within your income?"

Householder—"Certainly not. I have all I can do to live within my credit."

THIS

"I'm glad you're so impressed, dear, with all the information I've given you on banking and economics," remarked the young junior executive.

"Yes, darling," his wife answered, "it's amazing that somebody could know as much as you do about money yet not have any."

The tycoon has suffered all the reverses he could take and was very despondent. Climbing into his limousine, he said to his chauffeur: "Drive over a cliff. I'm committing suicide."

A tourist is a fellow who travels many hundreds of miles in order to get a snapshot of himself standing by his automobile.

OFF!!

By the time everybody gets through with the federal budget, about all the average taxpayer can do is budget the balance.

Doctor—"That pain in your leg is caused by old age."

Grandpa—"Nonsense. The other leg is the same age and doesn't hurt a bit."

Judge—"What's the charge, officer?"

Officer—"Fragrancy, your honor. He's been drinking perfume."

A personnel manager of a big firm kept a bowl of goldfish on his desk. "No, I don't like goldfish a bit," he explained. "I just like to have something around here that opens its mouth without asking for a raise."

Here's Ed Moon and Bill MacMullen waiting to greet you in our new store.

POWER RIG & EQUIPMENT CO., INC.

3523 GILMORE AVENUE • BAKERSFIELD, CALIFORNIA

FAirfax 5-9436

MAIN OFFICE: 3001 Cherry Avenue, Long Beach 7, California

GA. 7-7935- - - - - - NE. 6-8000